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ABSTRACT

This booklet presents articles completed in 1970 by the Division of Safety Education of the American Association for Health, Physical Education, and Recreation. The 11 articles deal with the following topics: a) the problem of apathy in safety education, b) the safety aspects of archery and riflery, c) weight training for high school girls, d) safety supervision of sports for girls, e) the problems of injury and accident prevention, and f) the Sports Safety textbook project. The booklet also presents the accomplishments of the Division of Safety Education from 1964 to 1969. The major points include changing the division structure, writing new operative codes, conducting a national conference, revising School Safety Policies, and contributing to the literature in the area of safety. A suggested outline for a college course in sports safety is also presented. (BRB)

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ANNUAL SAFETY EDUCATION REVIEW

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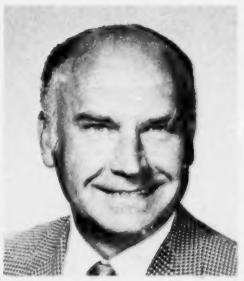

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SAFETY APATHY

Safety apathy is with us in all areas of human living. Each of us can spot irresponsibility, indifference, and insensitivity in human beings as they participate unsafely in various activities. This apathy is of short duration with most of the people in our society but even this short duration period can encompass injury, death, and destruction.

General Safety Apathy

This year, slaughter on our highways will kill 60,000 people, leave two million people disabled, and injure another two million people. Many of these fatalities and injuries are because of driving errors on the part of human beings—errors which can be decreased or eliminated through education, engineering, and enforcement. But apathy rears its head and severely limits the education in our schools designed to teach people to become safer and more cautious drivers. The science and art of staying alive on our streets and highways simply is not considered as important as a "solid subject" in the school curriculum. This is only one example of safety apathy operating in its fullest glory.

Safety Apathy in AAHPER

Whether it is school health, physical education, recreation, movement, or athletics, regardless of how one classifies areas under the broad umbrella of AAHPER, he still finds apathy.

Professional people know or should know that certain precautions must be taken regarding persons participating in physical activity. Why is it that health examinations often are not administered? Why is it that unsafe

environmental conditions frequently are permitted to exist in our areas of concern? Why is it that we seldom take sufficient time to stress the safe way of doing things? Could it be that we are a little apathetic? Why is it that when an unsafe condition is reported we sometimes witness greater concern for the threat of liability than for the concern for a person? Where is our true sense of values?

The following questions highlight those areas of responsibility where apathy tends to be most prevalent:

Do we examine all apparatus and equipment and play areas before activity?

Do we teach activities in a progressive manner?

Do we thoroughly supervise all activities or do we leave a piece of apparatus unattended?

Do we keep abreast of safety features in new equipment?

Do we remember that temperature and humidity, not the sun, are the important factors in heat exhaustion and heat stroke?

Do we insist that an injured student or player have a physician's approval before returning to class or returning to competition?

Do we realize that physiologic maturity and personality ought to be taken into account as well as grade level, age, height, and weight in matching adolescent competitors?

Do we provide for an accident reporting system not only for legal liability purposes but for the purpose of preventing accidents?

To offset apathy we need to:

1. Help people <u>want</u> to live safer lives.
2. Help people develop value systems which place major emphases on the worth and dignity of one's fellow man.
3. Prepare more people for initiating and conducting injury control and accident prevention programs in all phases of life.

J. DUKE ELKOW
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SAFETY APATHY IN GENERAL

Enthusiasm, excitement, and emotion about living safely and avoiding accidents are seldom evident among our citizens. Perhaps these are traits found only in dedicated safety professionals. While we do not expect an adventurous people to display ardor and fervor for safety, we also do not care to see apathy and inertia. In the continuum between apathy and ardor for safety lie numerous opportunities for man to demonstrate that he is a rational person capable of making the right decisions in the presence of certain hazards. There are specialists in safety who search to increase the national effort to curb accidents. They seek a national philosophy that will permit greater safety. All who agree with this goal have a responsibility to work for less apathy and more positive efforts for safety.

What is the extent of our apathy toward safety? In these United States during the last 70 years we have had more than six million accidental deaths. Before 1970 ends, we will have lost 120,000 more lives, disabled 12 million, and permanently impaired nearly one half million persons through mishaps. The cost of these accidents will exceed 24 billion dollars, a sum which is only a third smaller than the sum spent on public education below the college level last year. In the year ?000, just thirty years away, we may lose 150,000 lives as the result of accidents unless we develop better systems for injury control.

In a World Health Organization listing of the accidental deaths occurring among the people of 46 nations, the United States ranked 38th at a rate of 57.2 per 100,000 population. Poorer records of accident experience were attained by West Germany, France, Austria, South Africa, and Chile. Best records were earned in

the Philippines, Northern Ireland, Spain, England, and Wales. One might add that blacks were not counted among the South Africans, and in Chile political executions were counted as accidental deaths.

In the United States the rate of accidental deaths varies considerably in the different regions of our country. Highest rates of accidental deaths are found in Alaska, Wyoming, Nevada, and New Mexico, while the lowest rates are noted in New York, Illinois, Ohio, Michigan, and Wisconsin. The far western states are a little behind the states listed as lowest. (Source: Accident Facts, National Safety Council, 1970.) In general the more populated states have achieved better safety records. These variations may be ascribed to differing environmental conditions or to the degree of concern for safety.

Wherever man works, plays, travels, lives, or learns, accidents occur in significant numbers and rob him of a rich future through death, disablement, or property loss. A tremendous loss occurs in human productivity and creativity when accidents claim more lives among persons from one to 39 years of age than any other cause. The life years that are lost are enormous. .

Data on deaths are fairly reliable, information on injury is not. One federal agency is now utilizing computerized procedures in a hospital injury reporting system that will provide considerable data to enhance injury control programs. Injuries provide information on a system breakdown after mishaps occur. It is the wish of safety researchers to understand many of our systems so well that we can predict specific hazards within various activities and help prevent injuries from occurring.

Where is safety apathy most evident?

Man's mishaps accruing from his accident potential are recorded in four areas: traffic, home, work, and public. The data give some clue to man's apathy and a few examples in each of the areas may help in understanding why apathy exists and what needs to be done about it.

In the area of traffic, nearly one half of the 56,500 deaths last year occurred to drivers, pedestrians, and passengers who were markedly under the influence of alcohol. "Don't drink and drive" slogans appear to be as effective as telling an ulcer patient, "Don't get an ulcer." The narcotizing effect of alcohol increases man's apathy in assuming his responsibilities in the safe handling of his traffic problems.

Similarly, in civilian air transportation too many pilots of small planes are under the influence of alcohol when accidents occur, the pilots having lost their competency in the safe control of their plane. One wonders how many boating accidents are associated with lowered pilot

capability because of blood alcohol levels in excess of .015 ppm. Future studies may provide answers to this problem, but we need to find controls before the problem becomes more acute.

In traffic studies one notes the frequency with which drivers are involved in traffic accidents while their drivers' licenses are under suspension or revocation. To drive illegally is a denial of a basic responsibility and reflects adversely on the motorist who does so and on those who tolerate his doing so. That only 30 percent of the drivers who have seat belts and harnesses make use of these devices to control injuries is a classic example of man's apathy toward an engineered device that has proven value. Only a fool or an uninformed person will drive without such restraining devices.

In commenting on traffic problems we have identified a few human factors associated with accident experience. Environmental factors also exist where vehicle product failure, in tires, in braking systems, and in steering mechanisms or communications aids, is responsible for traffic injuries, a factor that had gone unnoted ten years ago. Consumer crusaders are trying to overcome public apathy toward product failure and force more stringent governmental and industrial controls to achieve greater safety. Man's failure to adhere to a proper maintenance schedule with his automobiles is likewise accountable for some of our traffic accidents. We still have some distance to go before we can successfully influence man to use his vehicles for their intended purpose.

In our homes more accidents occur than in traffic and at work combined. Last year 28, 500 home accident fatalities were recorded and some 4. 3 million disabling injuries. Falls led in home fatalities with 85 percent occurring in those over 65 years of age, indicative that controls are lacking. Injury control programs are attempting to reach into the home to lessen the prevalence of product failure in electrical appliances, heating systems, and the like, as well as human failures causing deaths frim fire burns, asphyxiation, drowning, and poisoning. At home, unwise use of alcohol and drugs contributes to injury and death in the back yard swimming pool, from falls around the house, and in many other home mishaps.

More effective controls have been applied to make man's place of work one of the safest areas he will experience. In the last 56 years, accidental work deaths were reduced 67 percent while the work force doubled in size and produced eight times as much, measured by gross national product. Workers were found to have three times as many accidental deaths off the job as on

the job. Poorer accident records exist in small plants in contrast to the larger ones. More diversified activities, less supervision, incomplete training, and inept selection of personnel are some of the factors causing this small plant record and reflect inability and/or apathy on the part of management to control hazards to workers.

Wherever man plays he experiences accidents increasing in frequency and severity. The general heading of public accidents covers most of our sports and recreational deaths as well as deaths and injuries in public places not involving the motor vehicle. Since man's leisure time will increase significantly in the near future as working hours are reduced, we can anticipate that more people will have more problems as they seek adventure in a society undergoing considerable turmoil.

Deaths from falls in public places is another hazard and those over 65 are significantly affected. Nearly 3500 young persons, those under 24 years of age, drown in public swimming accidents as well as 1400 of their elders. Another 1100 deaths, mostly drownings, occur in water transport accidents. Man's adaptability to the water is not sufficiently understood by enough persons and needless drownings frequently occur because an individual attempts to exceed his performance capabilities. Snowmobiling, spelunking, scuba diving, mountain climbing, and skiing are some of the sports where man is unwilling, almost apathetic, to place reasonable controls on his risk-taking, and too often sorrowful episodes are recorded.

Why does safety apathy exist?

It is more difficult to say why safety apathy exists than it is to identify factors causing accidents. Man seeks simple explanations for complex events. Accidents are very complex phenomena. When they occur, hurried and inaccurate judgments are often offered, which help no one. For example, carelessness is often given as a cause for an accident, and usually this would not be an adequate reason. Frequently, more subtle factors are involved and are not apparent. The kinds of quick assessments, so freely given, which obscure the multicausal factors in an accident are evident in the following examples: in traffic, excessive speed; in boating, a misjudgment of the sea; in flying, insufficient fuel; in swimming, overextending oneself. Little wonder then that the average man who hears glib explanations for mishaps may feel that the reasons given were unclear, inaccurate, applicable only to an isolated case, or inapplicable to him or anything that he might do. Furthermore, careful and sophisticated studies of accidents are seldom reviewed by individuals for lack of time, interest, or understanding. Man's apathy toward safety stems from some of the following beliefs:

"Accidents happen to other people, not to me."
(Uninformed)
"When your number is called your time is up."
(Preordained)
"Life is taking chances."
(The sport)
"Safety takes the fun out of life."
(A Challenge)
"Total safety is too costly, we can't afford it."
(Kill joy)
"I'll make the right decision when on a collision course."
(Confused)

An understanding of the combinations of human and environmental factors that are present when an accident occurs affords man better control over hazardous conditions. Even chance has much to do with an accident as well as its resultant harm. In sum, accidents stem from three basic factors: stress, an inadequate sense of responsibility, and chance.

How may apathy to safety be overcome?

Steering behavioral changes in more desirable directions is the educator's responsibility. He will be assisted ably by engineers, enforcement personnel, and researchers in developing man's awareness of those factors that provide greater safety, thereby changing apathy to enthusiasm.

Essential to the attainment of improved safety for any community is an informed citizenry including parents and workers, youths and adults. Developing attitudes, skills, and knowledge about safety will be the schools' responsibility, assisted by many capable out-of-school individuals and agencies who will contribute their expertise. It is generally accepted that any community can provide the amount of safety it desires. It will take dedication on the part of many community leaders to inform, motivate, and secure support for a better safety effort in the local, national, and world communities. With understanding apathy diminishes. Increasing the understanding of the hazards ever present in an advanced technological society is a community responsibility. Perhaps, as you increase your knowledge about safety, you will encourage your fellowman to join with you in working toward the development of a safer society.

NOTE:
"Safety Apathy in General" is a paper read at the national convention of the AAHPER in Seattle, Washington, on April 5, 1970, before the Divisions of Recreation and Safety at 10:45 A. M.

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RECREATIONAL SAFETY APATHY*

The overall theme for this 85th AAHPER Convention, "Preparation for and Adjustment to Change," is nowhere more appropriate than in the field of recreational safety, and perhaps nowhere more complex.

As educational and recreational leaders and safety professionals, you are faced daily with a multitude of social problems that relate to apathy. The list is a shocking commentary of man's indifference to man. Such indifference takes many forms, including crime, environmental pollution, traffic congestion, drug addiction, and immorality. In fact, if mankind ever needed the wholesomeness of greater recreational outlets, this is the time.

As we assess the significance of public indifference to recreational safety matters, it becomes apparent that the underlying problem is largely due to our successes in other fields. Increased effectiveness in controlling a host of diseases, vastly improved working conditions, expanded educational opportunities, greater disposable incomes, and longer vacations all contribute to the opportunity factor basic to any form of recreation.

These changes have seemed to make possible almost all things for all people. But attitudes change slowly. How could national priority be given to recreational safety when industrial accidents were killing 82 persons out of

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*Presented at the joint meeting of the Safety and Recreational Divisions of the American Association for Health, Physical Education, and Recreation, April 5, 1970, Seattle, Washington.

every 100,000 per year just two generations ago?* The harsh demands of earning a living left little time for discretionary use. And, of course, the Puritan ethic receded slowly. A generation ago, many of our most commonplace outdoor recreational activities were the province of only the most adventuresome and financially well endowed. scuba diving, water skiing, and flying for pleasure are obvious examples.

These changes in the style of living have been so widespread and pervasive that few of the responsible public service institutions were prepared for this leisure time with its increased recreational opportunities and challenges. While the changes have a high visibility, their effects are not so obvious. In 66 years man went from Wilbur Wright's first aircraft flight to Neil Armstrong's successful Apollo touchdown on the Sea of Tranquility. I suspect the moon mission—highly visible—will go down in history as a far more attainable task than the elimination of less visible recreational related accidents. This job is infinitely more complex than landing a man on the moon because it will involve not only a federal government commitment, but also the personal motivation of virtually every citizen.

To say that recreation is big business would be a gross understatement. An editorial in the National Parks and Recreation Magazine, January 1970, states:

> In the last 25 years, public park and recreation capital improvements have soared from $5 million to $325 million. Outdoor playgrounds grew from 9,921 to 27,000. Tennis courts escalated from 13,188 to 22,000 and softball diamonds from 5,452 to 11,000. Outdoor swimming pools have doubled in number and indoor recreation centers have tripled. Tax-supported park and recreation agencies hiked their spending from $31 million to over $125 million annually. This tremendous growth accounted for $100 billion sales in 1969 and represents only a hint of what is to come. By the year 2000—only 30 years away—the park and recreation sales market is expected to double again!
>
> The making and selling of park and recreation equipment is big business.

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*Between 1912 and 1968, accidental deaths per 100,000 population were reduced 29% from 82 to 58. This reduction in rate during a period when the nation's population doubled as resulted in 1,350,000 fewer people being killed accidentally than would have been killed if the rate had not been reduced. (NSC Accident Facts 1969)

It is also big business in terms of generating casualties. You will recall the outdoor recreation projections prepared by the Outdoor Recreation Resources Review Commission wherein driving a car for pleasure was shown as the most popular leisure activity in 1960. Although this actually has slipped in popularity, ranking just below walking and swimming, it will continue to be our third most popular recreation—aided in no small way by the 42,000 mile interstate highway system scheduled for completion by 1975. (It is now almost 75% complete with 30,000 miles open for travel.)

Last year this highway system was utilized by approximately 107 million licensed drivers. Ten million of those licensed drivers were under the age of 20. What happened might be described as safety apathy at its worst. Last year (1969), this form of recreation accounted for:

- 56,400 lives lost in motor vehicle accidents, many of the victims engaging in leisure travel.
- 21,500 lives lost in public accidents which included most outdoor recreational accidents.
- 27,000 lives lost in and around our homes, including those recreational activities conducted in the immediate vicinity of a home.
- 14,200 lives lost in work accidents.

This makes a total of 116,000 accidental deaths in one year alone, nearly three times the number of American lives lost since 1962 in Vietnam (41,000). Here the effects of change in terms of accident prevention have been anything but positive. Our accident prevention programs are simply not keeping pace with the problem.

A further example can be found in drowning incidents, currently the second leading cause of accidental deaths for ages five through 44. Present Bureau of Outdoor Recreation studies indicate that swimming is the second most popular form of outdoor recreation. Last year a total of 7.400 persons drowned. This casualty list has increased every year since 1963. It is further estimated that swimming will become the most popular form of outdoor recreation by the year 2000. If the accompanying drowning curve is to be reversed, it will be necessary to launch a massive swimming and water safety program far more comprehensive than any existing programs. The American National Red Cross, through its highly effective learn-to-swim programs, succeeds in teaching approximately $1\frac{1}{2}$ million persons each year. Our birth rate provides almost 4 million new citizens each year, leaving a net loss or untrained category in excess of 2 million.

To stimulate greater community interest in this problem and to help in marshalling the necessary resources in terms of both personnel and facilities, the National Safety Council plans to expand its Operation Waterproof 4th Grade. This is a national effort to provide swimming instruction and a knowledge of water safety to each and every child by the time he reaches the fourth grade.

Apathy in the face of these drowning figures and the growth potential of the problem could well follow the pattern of earlier traffic safety efforts which can be characterized as always too little and usually too late. The time to provide increased water safety instructional opportunities is now.

First problem: a complete statistical overview of recreational accident problems is impossible. Leisure time is so diversely expended that there is no way to provide the neat and tidy summaries so common to other loss categories. The scarcity of reliable recreational accident data is a major detriment to effective counter measures. Your parent organizations have data processing capabilities far in excess of what is actually being employed. Yet, the recreation accident information is not flowing in, except in fragmentary form.

Second problem: the absence of control measures. After all, who wants to link having fun with danger? Of course, regimentation would defeat the purpose of recreation, but certainly there are ways to obtain data on a problem, both through technological innovations and through voluntary cooperation. As one example, the Federal Aviation Administration has recently extended for two years its voluntary reporting of near collisions in mid-air in general aviation. This is done by guaranteeing immunity to any person willing to report such an incident regardless of the personal fault involved. This constitutes an entire new level of reporting by aviation safety planners.

A far less sophisticated but contemporary example can be found in the use of snowmobiles. During this past winter season, the National Safety Council has maintained a news clip surveillance of this rapidly growing wintertime activity. These brief commentaries, along with a few official reports, identified a total of 67 deaths directly associated with snowmobile operations. It might be interesting to note that the two leading causes of death while snowmobiling parallel the two principal causes of public accidental deaths; that is, collisions with motor vehicles and drowning as a consequence of ice breakthroughs. Snowmobile programs, particularly public information activities, for next season will be based on this information.

Such information along with special studies provides much of the raw input for the development of safety standards, which is the third point I want to cover.

In conflict with statements in other papers, but true in respect to "Standards", safety standards, as the term applies to products and to practices, is not suffering from apathy—at least not as far as the National Safety Council is concerned.

In the recreation area alone we have been involved during the past year in some aspect of the development of safety standards for youth camps, scuba diving, golf carts, mobile homes, small boats, head protection, ski tramways, snowmobiles, and we are still gaining momentum. Many recreational standards derive a good deal of spin-off from the professional sports work, usually but not always with positive results.

Much remains to be done, however, in the application of product safety standards beyond the drafting and publishing stages. I believe a much more stringent and compelling approach is in order. The case of a motel operator who insists on installing a diving board in his swimming pool when the water depth and side wall configurations are inadequate presents a special problem that requires specific and immediate correction.

The youth camp management that persists in operating when its physical plant has deteriorated beyond safe limits needs very immediate and very forceful attention. And this is the area where an AAHPER member can play a vital role. Local zoning boards, state and regional planning commissions, and environmental control agencies should include recreation safety professionals.

All too often the master plan or the long range program is a fact of life before the persons with the most to contribute are heard. I see this as an individual member commitment, separate from the efforts of AAHPER's Outdoor Education Project, Lifetime Sports Foundation, or other traditional divisions.

To counter apathy in recreational safety will require a good deal more from our allies not; that is, other professional groups and, most of all, the person who plays the game—and pays the bill.

Even this relates to the broader issue, that of recreation as a micro-organism of life itself. What kind of recreational world does America really want? As educators you will influence that.

ROY K. NIEMEYER
Michigan State University
East Lansing

FIREARMS SAFETY

Accidents involving firearms currently rank fifth in accidental deaths in the United States. Most of these deaths could be avoided were it not for ignorance, carelessness, and inadequate training and education. This fact has been proven true in states that require hunter safety training for young prospective hunters. Guns don't cause accidents—people cause gun accidents. Therefore, let us educate people to make the use of firearms for sporting purposes safe and enjoyable, and thereby reduce the number of firearms accidents.

Safety Rules

Three primary rules in the handling of guns that would help to eliminate gun accidents are:

1. Always point the muzzle in a safe direction.
2. Treat every gun as though it were loaded.
3. Be sure of your target and backstop.

Rules one and two mean at all times and in all places (inside, outside, on the range, or in the field). Point the muzzle away from people, even though the firearm is empty. Rule three refers to shooting at a target, whether it is plinking, on a range, or at game. The target must be recognized as such and both the target and the area behind it (for the distance and direction of travel of the shot charge) must be safe (i.e., free of ricochets, houses, buildings, livestock, and people).

Firearms Knowledge

What is the basic knowledge one should have to be a safe gun handler? Beginning in the home with storage, it is wise to have guns locked in racks or cabinets and ammunition locked in a separate place. The areas should be cool and dry. Avoid plugging the barrel after cleaning and leaving guns in carrying cases for long periods of time. Remove plugs before firing to avoid blow-ups. Remember that cases containing moisture may rust.

For the average gun sportsman, a detailed knowledge of the nomenclature of firearms is unnecessary. However, it is important to be familiar with certain parts of firearms for safe use. The action of a gun handles loading, firing, and unloading. Common actions in American guns are (1) hinge action (like a door hinge), (2) bolt action (similar to a locking bolt on a door), (3) lever action (like opening a tin shears), (4) pump or slide action (like a grease gun), and (5) autoloading action (the internal mechanism ejects empties and reloads automatically).

The trigger fires the gun. For safety's sake keep the finger off the trigger until ready to fire. The trigger should not release too easily (hair trigger) and should be protected from accidental discharge by a trigger guard and a hand around the trigger guard in situations where the trigger could be inadvertently tripped.

The safety helps to prevent the gun from firing accidentally. The safety should be on at all times (when afield) until the shot is ready to be taken.

Sights ensure accuracy. Most sights can be adjusted by the shooter so he can hit the object he's shooting at. Unfortunately, it is not uncommon to see people who have invested hundreds of dollars in a firearm (usually big game rifle) and in a fine scope but who don't know how to adjust the sights. Once I witnessed a man with the equipment just described come onto a range to sight in his deer rifle. He fired three shots, checked his target, cased his gun, and before leaving said, "It hits just like it did last year, high and to the left." He was then ready to go hunting! I wonder how many deer he has gotten, or wounded, using that gun. It should be stated in passing that the telescope sight is the most accurate and safest because it aids the user in positively identifying his target.

There are hundreds of details to learn about ammunition but the most important is using the correct type of ammunition. The size and shape of the cartridge or shell, the amount of powder, the amount of shot or weight of the bullet are factors to be considered. Play it safe, use only the correct and intended shell or cartridge for the gun in question. Don't experiment foolishly while reloading

ammunition. Disasters have happened when people have put the powder from three cartridges or shells into one and then fired them. Guns have blown up and people have been injured.

Gun care and maintenance have several safety aspects involved. Putting heavy grease in a barrel after cleaning and forgetting to remove it before firing causes excessive breech pressure and possible damage. Home repair of guns or tinkering with some of the mechanisms by non-experts is dangerous. A wise suggestion is to have gunsmiths make gun repairs.

Safe Gun Handling Practices

In the Car. Unload and case guns before putting them in a secure place in the car. It is unsafe to shoot from a vehicle (usually illegal, too).

Around Camp. Unload before coming into camp area, tent, or cabin. Place guns in secure position (not leaning against car, side of tent, or cabin).

In the Field. When walking abreast no one should point his gun's muzzle toward another person. The outside persons may point straight ahead, up, or to the outside, while center people should only point up or straight ahead. In single file, obviously only the lead man should point straight ahead while all persons may point to either side. Only the rear man may point back.

There are many ways to carry a gun. The best is the ready position, i.e., one hand at the fore-end and the other at the small of the stock. This is not only a secure grip and carry, but lends itself to fast shouldering. Carries such as the one arm side, over the shoulder, in the crook of the elbow, or a sling may be used. However, regardless of the carry used, the muzzle should be pointed in a safe direction and the gun kept under control at all times.

A zone of fire should be observed. This means each hunter in a given situation (e.g., walking abreast, sitting in a duck blind), knows the zone he will fire into should game appear. This agreed upon zone prevents hunters from swinging across onto each other.

Loading and unloading of guns should always be done with muzzles pointing in a safe direction—up, down, away from people. Consequently, should accidental discharges occur, no harm will be done.

A hunter or shooter should have complete control of self at all times, especially during emotional moments when a large buck appears or the beautiful cock pheasant alights. If the shot is unsafe (a horse in the line of fire, for example, or a hunting companion), it should not be

taken. It takes more of a man to pass up an unsafe shot than to shoot at a dangerous animal. When crossing obstructions in the field, unload the gun first and proceed carefully until the obstruction is passed. Common obstructions are fences, thick brush, downed trees, logs, rocks, ditches, and creeks.

General Rules

Never use a gun for a club or prod. Guns have discharged when struck against objects or when dropped (even with safeties on), not to mention the probable physical damage to the gun itself and its subsequent inaccuracy or danger.

Don't shoot into brush or tall grass to drive game out. Your friend may be hunting the area and you may have to drive him out—in an ambulance!

Be careful with fires. Fires are frequently used by hunting parties; be sure they are properly erected and extinguished after use.

Respect farmers' property, buildings, and livestock. It is unsafe and improper to shoot near or towards any of these.

Prepare to be lost! Yes, plan for it. Then if it occurs it may only be an experience rather than a tragedy. The important items to carry are a map of the area, compass, knife, and matches. Other valuable items include first aid items, cord, sheet of plastic, candy bars, piece of sausage or cheese, raisins, extra pair of socks, halazone tablets, plastic cups, water (in some places), whistle, small flashlight, and extra ammunition.

Know where your partners are at all times—whistle, talk, or see each other; if hunting separately, know the positions of one another by design.

Other safe gun handling practices in the field include:

- Wear protective clothing for certain kinds of hunting—red or blaze orange are easily seen. Dress properly and respect personal physical limitations. Good footgear is essential.
- Keep barrel free of obstructions (i.e., snow, mud, dirt, sand, sticks, leaves, etc.). These can cause gun blowups and, in fact, usually do.
- Avoid use of alcohol and narcotics.

In summary, gain knowledge of guns and ammunition, learn proper ways to handle them safely, develop skills that lead to safe habits, and have an attitude of caring coupled with the desire to be a safe gun handler.

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SAFETY ASPECTS OF ARCHERY

Archery, as many of the activities a student participates in, has areas that need attention to maintain a safe and enjoyable sport for the participant. To foster student interest, a minimum amount of instruction should be given prior to shooting. The motto in the archery phase of the Outdoor Education Project is "Immediate Participation, Immediate Success." The lecture method still has a place in archery instruction, but certainly not at the beginning of the activity. Students want to shoot the bow and arrow, not listen to a lecture.

Safety is stressed as an integral part of archery. All bows are strung for the student prior to class and the class is given the command to be used for shooting and retrieving arrows. One whistle means to shoot, or after the shooting line is cleared, to retrieve arrows. It is emphasized that no one nocks an arrow or shoots unless he is on the shooting line and the whistle is blown. Two blasts of the whistle mean danger, unnock all arrows, return them to the quiver, and step back off the shooting line. At this point a student is ready for instruction in shooting.

Range Safety

Archery ranges indoors and outdoors should be clearly marked to indicate students are shooting. This is especially important if obstructions are nearby, blocking the view of the range of the archers, the spectators, or the public.

The shooting line must also be marked clearly. Archers shoot from the same shooting line, with the targets clearly in view and low to the ground for beginners. For most official rounds, archers straddle the shooting

line. When the shooting line is crowded, two or more lines may be required, with each line taking turn to shoot. With beginning archers and especially young children, it is helpful to have them place their forward foot on the shooting line. The anchored foot helps to prevent novices from moving off the line. Another safety technique is the use of student coaches. When a line is waiting to shoot, pair them with a shooter. This helps both individuals recall the safety practices that are to be followed. The use of the videotape can also enhance the attentiveness of the student to archery safety by providing a completely graphic representation of archery procedure.

Arrows falling beyond the shooting line may be retrieved by the archer holding one end of the bow and maintaining his shooting position. If a bow drops in front of the shooting line, the instructor must immediately blow two blasts of the whistle. After all archers have moved back off the line, the bow is recovered.

Caution and courtesy are important with archers on the line. The bow should be held perpendicular to the shooting and target line. This will eliminate poking your bow in someone's face, back, or in between their drawn bow.

Beginners want to share their success with friends and the first bullseye or hit may send him running to a friend, with the arrow nocked. These first few sessions require close watch by the instructor keeping the archers on the line until all their designated arrows are shot. This is a very crucial point to remember, especially later during the introduction of various games in archery. It is worth repeating as enthusiasm usually increases to a high point during such periods.

After all the designated arrows have been shot and are to be retrieved, the archers should be reminded to walk to the shooting line. Running can be very dangerous; tripping and falling into a target with arrows is like falling into a porcupine.

For young archers the instructor may want to use a restraining line keeping all archers in back of the target, except the appointed target captain, who retrieves the arrows. From this safe position all arrows can be viewed safely. If archers are permitted at the target, they should stand to one side while arrows are safely pulled. Crowding in front of the target may result in observers getting poked in the face or elsewhere by the plastic nock.

For ranges that require retrieving arrows beyond the target and possibly out of sight of advancing archers (field course), either one archer should stand in front of the target or place a bow across the face warning others that archers are searching for lost arrows.

The target line should, ideally, have an unobscured area behind and to the sides as well as in front of the targets. This allows for maximum safety to archers and others in the area.

A nylon net used as a backstop prevents arrows from carrying beyond the target line and yet allows a clear view of the area in back of the target.

Bales of hay, straw, or excelsior piled high may stop arrows but also makes an excellent spot for youngsters to hide behind. Such a range, unfortunately, has been viewed by many as a safe backstop.

Personal Safety

Correct body position and clothing must be taught for safety and enjoyment in shooting the bow. The string at full draw comes into the side of the chest. It must not be drawn in front of the chest. Such a mistake can be painful and dangerous especially to girls.

Hair, glasses, jewelry, and other dangling items should be removed before shooting. Loose clothing should be removed and jackets, sweaters, etc., buttoned or zipped. Although heavy sleeves protect the arm, the wrist guard should still be worn on the outside allowing the string to slide smoothly past the arm. Bulkly sleeves should not be pushed up but kept down on the arm, as a sleeve pushed up in a bunch can catch the string and cause trouble to the archer.

The bow elbow must be kept in the normal position to avoid string slap. A common fault of archers, especially girls, is a pronated elbow which rotates into the path of the string. The bow shoulder also needs attention and should be set or tightened before drawing. If it is allowed to move or soften up against the pressure of the bow, it will expose the entire arm to string slap.

Equipment Safety

After shooting several sessions the archer should be taught how to string a bow. The step-through method is the only safe method to use and it will not twist the limb if done properly. The heel of the ankle, on which the lower limb is placed, should be raised and turned out or away from the center of the body. In doing this you eliminate the twisting of the lower limb. If this is not done the upper part of the foot and the ankle apply pressure in opposite directions and shortly the limb is permanently twisted. The alternative to this method is either a commercial stringer or the push-pull method. The commercial stringers are fine for class use. However, the

individual who wants to have his own bow requires instruction on the proper stringing. The push-pull method may eliminate twisting of the limb, but it is extremely dangerous to the archer. Such a method may result in a face or eye injury. Unfortunately, too many still use and recommend such a method of stringing.

The bow string must be checked each day before the archer shoots. Frayed strings or dry strings that require waxing should be taken care of promptly. The pressure placed on a string is greater than most people realize. The pressure of compression on the face of a 40 pound bow when drawn 28 inches is 180, 000 pounds per square inch, while on the back of the bow it is 135, 000 pounds per square inch. Thus, the condition of the string is most important to the archer's safety as well as to the bow. It should be stressed that a bow should not be shot without an arrow. The arrow absorbs a great deal of the pressure upon release and without it the bow string could snap, possibly resulting in a broken bow and injury to the archer.

For the beginner, the arrows can be measured by placing the nock in the chest allowing at least the point to protrude beyond the finger tips. This margin of safety will help eliminate the hazards involved if a beginner overdraws. In the overdraw (caused when the anchor point has not been established or by short arrows) the arrow may hit the face of the bow breaking the arrow and sending the broken splinters into the archer's hand or arm.

The tab or glove should be worn at all times as they help eliminate blisters and are necessary for a smooth release. Wrist guards must also be worn; no archer should be allowed to shoot without these two items. A new wrist guard should be shaped so it fits the archer's arm. The wrist guard will protect the arm and it allows the string to slip past the arm smoothly. Without the leather guard it may catch on the sleeve material hitting the arm and throwing the string out of alignment.

The use of quivers will reduce the loss of arrows. Arrows laid on the ground are very likely to be stepped on and damaged or lost.

Most archery programs use wooden arrows, consequently, several of the following remarks pertain to the safety measures to be observed primarily with a wooden arrow. Any arrow that has splintered should be broken in half and definitely not repaired for additonal shooting. With the amount of pressure placed on an arrow, as previously indicated, a splintered arrow may literally explode sending fragments in all directions, including into the archer's hand and arm. Thus, all arrows should be thoroughly inspected, especially after hitting a solid object other than the target or when hit by another arrow.

The thrust of the bow bends an arrow from three to six times in flight (known as the archer's paradox) while traveling to the target. Such strain on the arrow requires it to be in perfect condition. Nocks broken or bent should also be replaced. Feathers and points that are loose or missing can also be dangerous to both the archer and the arrow.

The success of a well shot arrow is dependent upon the safety of the range, the personal observance of safety by the archer, and safe equipment. That combination will mean hours of enjoyment in a variety of activities that are available to archery enthusiasts.

The Outdoor Education Project of the AAHPER, under the direction of Dr. Julian W. Smith, in cooperation with business and industry, has conducted archery workshops throughout the country bringing new ideas to educators about an old activity while emphasizing safety as an integral part of any successful archery program.

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SAFETY APATHY IN SCUBA DIVING*

As a thoracic surgeon and Research Director of the Seattle-King County Safety Council, faced with the challenge of discussing safety apathy in recreation, vignettes from both my practice and safety work flash through my mind. I a ı reminded of the Little League baseball player, age 12, brought to me by his father. The lad had an extremely painful right elbow and there was every medical indication to prohibit him from playing baseball. The lad would have welcomed release from his pitching activities, but his father, for substitute male ego reasons, insisted that the boy continue to play even to his possible permanent detriment—an instance of ignoring safety completely by a father who was projecting his own thwarted ambitions into his boy's activities.

I am constantly admonishing people not to smoke, knowing that smoking can ultimately cause death. Cancer of the lung is obviously a direct result of smoking. Emphysema is continually made worse by smoking and a host of other chest problems are aggravated by smoking; yet, I find people continue to smoke in spite of warnings concerning damage to their lives. There is a direct correlation between that apathy and apathy regarding safety in sports.

A device is on the market tethering one by an air umbilical to a pump floating on the surface enabling exploration under water, without any significant education in the hazards involved, without licensure and with the

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air intake close to the exhaust system, with the very distinct possibility of carbon monoxide entering the system. This has every indication of apathy in regards to safety precepts.

In the field of general aviation, I am concerned over the fact that the cabin for an aircraft is stressed for just a few G's, protecting the body in the cabin hardly at all. We know that a body can withstand the impact of 40 G's and yet the airplane seats and "capsule" are stressed for a fraction of that.

Also, we know that as far as cars are concerned, wearing shoulder belts does reduce the incidence of injury quite significantly, and in airplanes even more so, in the case of accident. Yet, although airplane manufacturers in the past have attempted to produce shoulder harnesses, they are, by and large, ignored by aviators, to the point where it now costs about $240.00 per harness per seat, a fantastic price which would deter a large number of general aviation pilots from making this investment. However, produced in the mass, this price should be greatly reduced. Apathy of the pilot to this safety factor results in a reduced demand and therefore a high unit price.

I want to tell the story about a diver who called me one day and excitedly said, "I have been hit with air embolism. I need help." I informed the man that if he was able to dial the telephone and talk to me, he did not have air embolism, but under any circumstances he should come down for an examination, which he did. I found him to be an inveterate smoker and advised him not to smoke and, under the current circumstances of bronchitis, not to dive. He decided to do neither and he did not come back, rejected the advice completely, and had total apathy to the safety aspects of diving. Incidents of this sort plus a number of bodies floating up on the water around this aquatic capital of America has led our Safety Council into investigation of the common causes for scuba diver deaths. This is one instance where we can achieve, by promulgation of our facts, complete obliteration of this cause of death. Since we have launched our program of indoctrination, we have not had one single death from air embolism. Indeed, we have too few bodies to be autopsied now to pursue an in-depth study proposed in a research grant provided by the National Safety Council—a deficit that we do not want to see change!

Man's desire in this rapidly changing and expanding world to explore one of his alien environments—the sea—requires a physiological constitution which he does not possess. The environmental factor of underwater living calls for a new storehouse of facts. Man may explore the sea superficially by swimming and at great depths by

surrounding himself with submarine machinery and hard-hat diving gear or by the very mobile equipment of scuba (self-contained underwater breathing apparatus).

This area being the "Venice of Ame.ica" with 1, 800 boats in King County alone, one boat for every six people, we have a very vested interest in survival on and below the water. Puget Sound is very cold and the water temperature varies only a few degrees during the summer to winter months. The average expected survival time when a body is immersed in water of this temperature is not very great. Aquatic safety is very real in our country.

Scuba Project

Because the problem of investigating scuba deaths is one of cooperation, we enlisted the aid of our coroner, county sheriff, Harbor Police Patrol, coast guard, and the Seattle-King County Safety Council.

Scuba deaths in Pacific Northwest, although not impressive in number as are automobile deaths, do have the unique distinction of virtual total elimination. It is our contention that scuba deaths in our waters frequently result from preventable air embolism. These deaths are not drowning deaths, as commonly thought.

Our procedure of investigation was to have the officer who found the body inform the Seattle-King County Safety Council team immediately. The body was impounded in the refrigerator to prevent decomposition. We also impounded the scuba gear, particularly the tank, for analysis and inspection. Special autopsy techniques were employed, immersing portions of the body underwater. The ideal is to submerge the entire body, a technique which is not generally available. Statistics will be useless in scuba deaths until we have a standardized autopsy technique. We have investigated the dead diver's clinical history in detail by talking with previous doctors, checking with hospital X-ray departments, and getting X-rays from the mobile tuberculosis units. In addition, our research divers would go down at the area where the driver was lost and make an environmental study of the surrounding area, including factors such as water temperature and underwater hazards.

Air embolism is not the "bends," which is nitrogen gas bubbling out of solution, going to the heart, lungs, brain, and bones, resulting in a very serious and painful malady.

Air embolism is caused by a ball-valve mechanism in which air can get into the alveolar sacs of the lung, but cannot get out since a bronchus widens during inspiration and narrows during expiration. Eventually, the tensile

strength of the alveolus is exceeded and rupture occurs, with or without pneumothorax, but with air entering the torn veins, spreading to the rest of the body, particularly to the heart and brain, where it causes a lethal block to circulation.

It is important to understand Boyle's Law. At sea level we are exposed to one atmosphere of pressure. For every 33 feet one proceeds downward in water, one more atmosphere of pressure is added to the body, compressing gas. On ascent, if the air is not released by exhalation, it will expand inversely to pressure, causing a rupture. If the air cannot escape because of a bronchial block, the same thing occurs.

Air embolism is caused by holding one's breath on ascent, primarily due to lack of training and panic, and to partial bronchial obstruction. It is to the latter we are concerned with here. Partial bronchial obstructions can be caused by tumors, both benign and malignant; by cysts, foreign bodies, by tuberculosis, smoker's bronchitis, asthma, and by bronchiectasis. It is up to the examining doctor to deter individuals who fall in this category from diving, in order to save their lives.

The only treatment for air embolism is immediate recompression. Without that, the patient generally dies. He usually cannot be transported. The ideal, of course, is to have a recompression tank at the site of every scuba diving team, but this cannot be accomplished currently in America.

A physical examination of the lungs is vital. If this particular lung examination were included in each examination for scuba divers, it would eliminate those who would be prone to develop air embolism because of physical defects not necessarily symptomatic. These examinations should parallel the Federal Aviation Agency's flight surgeon examination for pilots. There is no excuse for it to be anything less and every reason for it to be just as rigorous. This concept might be hard to sell to some of the diehards, but it is vital to preserve life.

Summary

In final analysis, what is needed is a rigorous physical examination, particularly of the lungs, and abolishment of apathy toward diving hazards by proper training and elimination of those unfit to dive before they ever enter the water. We have demonstrated that this apathy toward the dangers of diving can be eliminated by proper education in advance, by promulgation of data through safety council channels, and by inclusion of this material in the actual didactic program of the student diver. In Seattle,

surrounded by water, we have gone from several deaths per year to no deaths per year, presumably as a result of our intensified educational program here. We would recommend that this be expanded to a major nationwide program. Vital to it is adequate understanding and adequate examinations carried out by a trained chest physician. Apathy can be detected and overcome. It takes teamwork on the part of the educational system and the safety movement.

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WEIGHT TRAINING FOR THE HIGH SCHOOL GIRL*

Not all of the original strong men were men. Recorded history shows that women also traveled the country performing feats of strength. It is interesting to note that a number of the girls' facilities at Eastern Washington State College, Cheney, Washington, include weight training facilities. These were installed at the request of the girls. Not all of them are used to build muscles. Many of the girls merely want to firm up their figure and so the facilities are well used. The College has developed a comprehensive curriculum of weight training courses for girls.

All of the girls in the athletic program at the college participate in this organized weight training program. Spotters are used during the training period; girls are not as handy at maintaining their balance during the early training periods and thus spotters are an essential part of the program. Weighted shoes can be very helpful but they are generally made for men and are therefore too big for the girls. At any rate, caution is advised if they are used with women. For example, the shoes come equipped with webbed straps which have a tendency to loosen because they cannot be cinched tightly onto girls' shoes. These straps should be replaced by ones made of leather with a buckel that utilizes holes in the leather to keep the straps tight.

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*This article is composed of a summary of a presentation made from slides by John Leighton as part of a panel program on "Safety in Competitive Sports for Girls," recommendations by the Panel Discussion Leader, and a report of questions and answers.

The weight training equipment should not be grouped together as is done for boys. The experience at Eastern Washington College has indicated that the girls work better if the equipment is placed in various parts of the room. It is also easier to give individual instruction by using this method.

Generally speaking, weight training is advised for women only if it is under careful supervision. Women will never develop muscles like men because they have less muscle fibers to develop. But weight training can prove valuable to the girl athlete by preparing her to compete in athletic contests.

Panel discussion leader Neil C. Jackson recommended the following safety items for the consideration of the audience:

1. Take care to use weight training for developing the weak muscles that will be needed to better perform in a chosen sport.
2. While developing muscles be sure to consider the overall agility needed for competition in a specific sport.
3. Take good care of all equipment, inspecting regularly, repairing when necessary, and discarding the items which cannot be repaired.
4. The work-out area should be conducive to the activity to be performed. It is your job to see that it is properly designed, arranged, and maintained.
5. Keep accurate and complete records of all injuries during weight training, practice, and competition. A review of these facts regularly could turn up a significant cause of injury.

The following questions and answers took place:

1. Has Eastern Washington written up its conditioning program for women?
   A book entitled Progressive Weight Training has been published and is available.
2. Is there a specific age at which to start a girl on weight training?
   It was recommended that it not be used below the junior high school level.
3. Why haven't the manufacturers of athletic equipment given the same amount of attention to girls' equipment as they have to boys'?
   Until recently, the market has been too small. They have concentrated on the boys because they sell products. As more girls begin to compete they will give more attention, time,

research, and money to develop the items needed for girls.

4. Are there any guidelines for returning the girls to competition following an injury?

   In this instance it must be noted that people heal at different rates and others have a higher tolerance for pain. These differences alone make it impossible to set up a rigid standard. Two other items must be considered: (a) the girl must feel ready to return to competition, and (b) the school physician must be convinced that she is again ready to compete. The physician is the final authority.

5. What can you do if the family doctor has recommended a specific treatment and another physician suggests another approach? Family physicians are generally not up on all of the new areas of sports medicine.

   There are very few instances where any two people will agree on a given subject. Don't be alarmed when this happens. The family physician can hardly be expected to be an expert in sports medicine. However, he is usually willing to listen to an expert. After all, he uses them in his practice daily. The important thing to remember is that the school physician has the final authority on when the girl can return to competition. His advice and knowledge should be sought. He could be the bridge between the family physician and the parent or between you and the family physician.

6. What can be done to help the parent understand the importance of a good pre-participation physical examination?

   The school nurse, in close cooperation with the parent, fellow educators and the school physician, can do a great deal to help solve this problem. The nurse, through a phone call or a home visit, is a key person in this siguation. An article entitled "Team Physician" published in the Journal of School Health in 1968 is an excellent source of information on this topic.

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SAFETY SUPERVISION OF SPORTS FOR GIRLS

When I was contacted and asked to be a part of this panel I realized it would be a great opportunity for a school nurse to become better acquainted with her fellow teammates. I refer to you as teammates because I believe this entire program of health and safety supervision involves team effort on the part of the various people in the physical education department, the health services staff, and the school administration. In a broader sense we must also include other teachers, counselors, and certainly parents who can effectively work with us.

Two basic steps to be taken in regard to health and safety supervision in sports are to obtain both the written consent of the parents and a completed physical exam form on each student before she begins any participation in a sport. Communicating with parents through a newsletter concerning the purpose, requirements, and benefits of the proposed sports program is an effective method for obtaining parental permission. A medical exam form could be included with this letter along with an explanation regarding the request for a doctor's examination. In the regular physical education program the physical exam requirement may be difficult to enforce; however, it can be strongly recommended and encouraged if we present a united front on the matter. While the responsibility for informing the parent of the need for the physical exam rests with school personnel, the whole community must be made aware of the need for a good health and safety program in the school so that better cooperation can be obtained.

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*This paper was presented as part of a panel program on "Safety in Competitive Sports for Girls."

If the school district has a school physician, he can be used to communicate the ideas of the school's safety program in sports to his medical colleagues and they in turn can work together in establishing policy statements to parents regarding the physical education program. In this way a good line of communication can be established between the school and the medical community.

The school nurse can reinforce this communications line by working as a liaison between the school or private physician, the individual student and her family, and the physical education teacher. Personal contact with the parent can be made either by phone or home visit and encouragement given to obtain a physical exam. If the physical exam by a private physician proves a financial burden to the family, alternate methods of obtaining one can be suggested, using the resources available in the particular school or community.

The nurse should screen the completed physical exam forms and confer with the teacher in regard to the recommendations made by the physician concerning such students as those with any physical defects; those who should be placed in a modified program following serious illness, injury, or surgery; or those who need to be exempted entirely from certain sports. If a physical exam form is not screened thoroughly, it becomes just a useless piece of paper instead of a valuable health index.

Through personal conference with the student and a study of the complete health record, the nurse and teacher can determine the student's program, making every effort to carry out the recommendations of the family physician. We must all keep in mind that not every student will have the same health problem; therefore, programs will have to be adapted to fit particular needs so that students will not have to miss participation in a sports activity or a physical education class unnecessarily. Some classes may have to be limited in size in order to handle students with specific handicaps. If physical facilities are inadequate or if there is a lack of personnel, then individual programs will have to be altered to provide the best program possible within the local school situation. An important factor to keep in mind, however, is that we do not want to create such an issue over these students that they lose their social identity with other students. If we do this, we have defeated the whole purpose of our program.

Menstruation is a factor which must be considered in any sports program for girls. Since it is a perfectly normal biological function, girls should be encouraged to treat it as such; however, provision should be made to meet the needs of those who may require a less strenuous

program during this time. A positive attitude on the part of the teacher can help shape constructive habits in these students.

A third basic step in health and safety supervision is to take accidents seriously. They are not, and I repeat, are not, an incurable problem, however, we all need to work together to help combat this problem. Accidents present a real moral and legal responsibility which we cannot overlook. It is our duty to anticipate the possibility of accidental injury and to act toward its prevention. Students must also be educated to understand that there are risks involved in sports and that precautions should be taken to avoid them. But, on the other hand, we do not want to create unnecessary fears of accidental injury. A proper balance must be provided. And so, realizing that our work deals with fellow human beings, and since humans are all capable of making mistakes, provision should be made to handle accidental injuries. School accident reports should be kept, for they can provide a valuable resource in pointing out areas that need correction. Policies for handling accidental injuries should be worked out by each school district and people trained in first aid should be available for emergency care. A physician should be present or on call during all major sports events, with some type of first aid facility near the playing area. Adequate accident insurance should be made available for participants.

Each student should be helped to feel her responsibility toward the safety of the entire class. This can be partially accomplished by helping each student understand her own strengths and weaknesses. Some students are definitely more accident prone than others. The physical, mental, and emotional maturation of the student must be considered, along with the student's previous experience in physical activities. Making the physical education program or sports activity a pleasant experience can create a positive stimulus which contributes to the general success of the entire safety program.

Students should be encouraged to help develop policies and procedures concerned with safety but should never be held responsible for correcting situations over which they have no control. For example, a student has no direct control over the physical arrangement of the school building or the permanent equipment placed within it. Therefore, if the placement of a projecting fountain in the gymnasium contributes to an accidental injury, it becomes a matter which should be referred to the school administration. Hopefully the school administration will not just give lip service to concern over environmental hazards at school but will actively work to remedy them.

Instruction in the proper use of equipment and techniques, conditioning students and observing good practices in warm-up time and length of practice sessions, providing well lighted and clean play areas, limiting competition to teams of equal size and ability, and enforcing safe transportation and reasonable travel limits are all musts in a good safety or accident prevention program.

We should keep in mind that safety supervision is a continuous process of revision and evaluation, and to be effective it takes the attentiveness of all concerned. A factor which compounds the problem of accident prevention is overcrowding in the physical education class. This is a particular concern in my own school and many others around the nation. Overcrowding places an additional burden on the physical education teacher.

In closing, let me re-emphasize three of the major points presented this morning:

1. Obtain parental permission before allowing participation in sports
2. Require that a complete health examination be taken
3. Take a preventive attitude toward accidents.

Health enriches life and physical education can provide the setting for emphasizing good health habits. Health education should contribute not only to the physical development of the student but to strengthening moral qualities as well. In developing constructive guidelines for health and safety supervision of sports, we are working toward this goal.

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SPORTS SAFETY TEXTBOOK PROJECT*

The Sports Safety textbook project has been one of the most ambitious and significant activities of the Safety Education Division since its birth at Portland, Oregon, during the 1959 National AAHPER Convention. As early as 1960 division officers recognized the need for a publication which dealt in detail with the injury problem in sports, but many problems dealing with organization, setting goals, and implementing short-range goals had to be considered before the Sports Safety textbook project could be undertaken.

Everyone responsible for instruction in sport activities, whether it be in physical education classes, coaching, or recreational endeavors, realizes the lack of an up-to-date publication in the area of sports safety. The two most noted early publications[1, 2] in this area are now out of print. While literature dealing with safety in a specific sport can be found in various periodical publications, there is no one single publication which includes the knowledge and techniques considered essential to safe participation in many sports. The Sports Safety textbook

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*Presented at the combined Division meetings of the Physical Education Division and the Safety Education Division of the AAHPER on April 4, 1970, as a part of the program during the 1970 AAHPER National Convention in Seattle, Washington.

[1]Frank S. Lloyd, George C. Deaver, and Floyd R. Eastwood, Safety in Athletics. Philadelphia: W. B. Saunders Co., 1936.

[2]Don Cash Seaton, Safety in Sports. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1948.

thus brings together in one place information for those interested in or responsible for conducting programs in sports.

Basis for the Textbook Project

Before the Sports Safety textbook project was undertaken there were two national conferences on "Accident Prevention" which resulted in AAHPER publications[3, 4] and which provided a broad basis for the forthcoming text. Both of these publications dealt with the desirable policies to be followed by school and college administrators of physical education, athletic directors, and those responsible for recreational sports programs. A major need existed, however, for a reference publication which would focus on techniques for implementing or translating broad policies into action through the adoption of known and sound injury prevention and control practices. Sports Safety is designed to achieve this goal of translating broad policies into action programs for curtailing sports accidents and injuries.

Textbook Project Gets Underway

Through the efforts of Safety Education Division officers, including Daniel P. Webster of the Accident Prevention Division of the U. S. Public Health Service, a contract was negotiated with the U. S. Public Health Service and AAHPER for completing the proposed text. At Philadelphia in May 1967, the Editorial Committee selected by division officers gathered to develop a detailed outline for the proposed text, and to begin preparation on a manuscript. By August 1967, prospective contributors were contacted and forwarded pertinent information regarding the writing of manuscripts. Meetings of the Editorial Committee were held periodically during 1968 and 1969. The manuscript, involving contributions from 52 authors and 25 consultants and containing 674 typewritten pages, was submitted to the U. S. Public Health Service in December 1969, for review. A final editing is scheduled during the summer of 1970 with anticipated publication by the AAHPER in late 1970 or early 1971.

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[3] Suggested School Safety Policies—Accident Prevention in Physical Education, 1964. 26 pp.

[4] School Safety Policies with Emphasis on Physical Education, Athletics, and Recreation, 1968. 32 pp.

Main Sub-Divisions Within the Text

Part I of this publication (Chapters 1 and 2) will deal with the accident problem and the philosophy of accident prevention and injury control in sports. Part II (Chapters 3-10) will deal with general administrative policies and procedures in terms of "external controls" and "internal controls." External controls refer to rules and regulations imposed by a group other than the sports participants' sponsoring institution or organization, and internal controls refer to those administrative and supervisory practices which are within the sponsoring institution or organization. Part III (Chapters 11-54) will deal with safety in specific sports or activities. Part IV will contain appendices and the Editorial Committee strongly believes that the appendix containing a "Suggested Outline for a College Course in Sports Safety" will be of great value to the profession. It is believed that better leadership training can be provided in colleges and universities in the area of preventing and controlling accidents and injuries in sports. We often see that colleges and universities rely upon the inclusion of injury prevention information in methods and skills courses. As indicated earlier, there are books dealing with injury prevention in sports, but these are now out of print; and there are isolated articles and studies published, but the lack of a comprehensive text on injury prevention in sports has discouraged colleges and universities from providing leadership training courses. We thus find the integration of accident prevention information in regular skill oriented courses and methods courses to be on a hit and miss basis, dependent upon the interest and time of the instructor to compile available detailed information on accident prevention in sports. It is this factor which the speaker believes to be of major significance to the Sports Safety project. It is believed that you and all members of the AAHPER, and others, strongly support the idea that all specialists entering the field should be very knowledgeable on the extent and causes of injuries in various sports; the general controls for their prevention; injuries unique to various sports; and techniques for their prevention. As an essential beginning, the forthcoming text, which includes the suggested course outline for a college course in sports safety, will provide the basis for leadership preparation in injury control and accident prevention in sports.

I would like to pay tribute to certain people associated with the Sports Safety project. Indebtedness is expressed to the Safety Education Division officers; to the authors and co-authors of the many sections of the text

who will be identified in the Table of Contents and in the text where their fine contributions appear. Collaborators and reviewers who contributed valuable assistance will be acknowledged at the end of various sections in the text.

Particular indebtedness is expressed to members of the Editorial Committee, including Bernard I. Loft for his leadership as Textbook Project Director; to Kenneth S. Clarke, J. Duke Elkow, A. E. Florio, and Daniel P. Webster for their excellent teamwork in compiling and assembling information and in acting as coordinators of various parts within the text; to Edward Mileff who served as Liaison Officer between the American Association for Health, Physical Education, and Recreation, and the United States Public Health Service; and to John L. Morgan, the Project Officer for the United States Public Health Serivce, for his wise counsel.

On behalf of the Editorial Committee the speaker states that Sports Safety will meet a long felt need for a text to be used by the profession to achieve further reductions in accidents and injuries in sports.

A. E. "JOE" FLORIO
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Urbana

ACCIDENT PREVENTION IN SPECIFIC SPORTS

The Sports Safety project is divided into three main parts. The first deals with philosophy and problems, the second deals with administration and supervision, and the third deals with safety in specific sport activities.

I believe one of the unique and outstanding features of this project was the willingness of 46 different persons from coast to coast and border to border to take time to develop a concise, brief description of how to prevent, control, and reduce the frequency and severity of accidents in over 50 different sport activities.

Time will not permit me to describe all of them to you nor will it be possible to tell you about the various authors, but I can tell you that they are outstanding persons representing the various disciplines that our association encompasses. They are nationally known outstanding coaches, athletic directors, administrators, and teachers.

The sports activities section is divided into the following areas.

Development and Play Activities

The writer of this section sets the tone that should be understood by all of us in the initial phases of understanding the problem of accident prevention. I quote from the summary of her section:

> Safety must be considered in relation to all movement that is taught. The individual must develop the knowledges and attitudes that will enable him to recognize worthwhile movements. He must have respect and consideration for others as he moves and he must be alert to the movement of others. Strength, coordination, agility, balance and flexibility are essential if one is to move safely.

In addition one must develop and utilize self-discipline if he is to move safely with others and with objects.

Living is an adventure, an exploration. Modern living presents increased hazards because of the movement of people and many objects of varying sizes, shapes and speeds. If man is to move safely with the masses he must first learn in his youth to move safely as an individual, then with the group in controlled environments.

Some key phrases in this concept that deal with safety and movement are:

1. The individual should develop knowledge and attitudes.
2. The individual should have respect and consideration for others.
3. The individual should have strength, coordination, agility, speed, balance, and flexibility.
4. The individual should have self-discipline.

If these concepts are implemented, a firm base will be established for an accident prevention program in sports.

The remaining sections in this part of the report deal specifically with sport activities, and they are divided into the following categories:

Team Sports
- Baseball and Softball
- Basketball
- Field Hockey
- Football: Touch, Flag
- Ice Hockey
- La Crosse
- Soccer
- Volleyball

Individual Sports
- Archery
- Bowling
- Equitation
- Golf
- Gymnastics
- Marksmanship
- Track and Field
- Weight lifting

Dual Sports
- Fencing
- Handball
- Judo
- Racquet and Paddle Sports
- Wrestling

Aquatic Activities
- Swimming, Diving, Water Survival, and Rescue
- Recreational Swimming
- Fancy Diving
- Water Polo

Open Water Aquatic Sports
- Small Craft
- Water Skiing
- Diving: Skin, Scuba
- Surfing

Winter Sports
- Skating
- Skiing
- Tobogganing and Sledding
- Iceboating
- Ice Fishing
- Snowmobiling
- Snowshoeing

Outing Activities
- Fishing: Stream, Surf, Boat
- Camping
- Hunting
- Hiking and Mountaineering
- Bicycling
- Recreational Motorcycling

Dance

Most of you are familiar with the activities included in these different classifications but I would like to mention a few that have had a rapid rise in accidents in the past few years. They are: water skiing, skin and scuba diving, snow skiing, ice boating, ice fishing, snowmobiling, snowshoeing, camping, and recreational motorcycling. You will note that many of these are primarily in the recreational areas and many times are seldom mentioned in any specific accident prevention program. Although there is no question that an increased emphasis must be placed on accident prevention in all sport activities, we must double our efforts for safety in the recreational sports activities. Our recreation leaders tell us that the demand for recreation of all types will be much greater in the next 50 years and, if these are going to be enjoyable experiences, they must be made as accident free as possible.

All too often many of us have developed a philosophy that sports do contain significant risks and those who want to participate just have to take their chances with such risks. The laws didn't help the situation either because in many states school administrators, coaches, and teachers were able to hide beyond the cloak of immunity regardless

of the condition of the playing field, equipment used, or the instruction given to the participants. Fortunately, the concept of legal liability has changed in recent years. Recent court decisions tend to hold the school, coach, supervisor, or teacher liable for negligent performance.

As leaders in our profession, and because many accidents occur in our areas of interest, it becomes a moral as well as a legal obligation for sports teachers and leaders to develop competencies in their areas of responsibility, so that our youth will be able to participate in sports and recreational activities without the danger of serious accidents.

The questions we should answer:

1. Are we providing relevant experience in our professional preparation?
2. What are the best ways to provide competencies in sports safety?
3. How can we implement the program—statewide, nationwide?

Those of us who prepare teachers, coaches, and recreational leaders in our institutions of higher education are negligent if we don't provide professional experiences which develop competencies for accident prevention.

This project and the suggested course outline will be the first step in fulfilling our obligations toward safety in sports. *

*See page 66 for the Suggested Course Outline.

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THE INJURY PROBLEM

From the negative side, the term safety immediately suggests a multitude of restrictions that do not conform to the adventurous, vigorous, and stimulating activities that make up a qualitative program of physical education, athletics, and recreational sports. The nature of our concern is that safety as a style of living provides greater adventure in life through a variety of significantly important movement activities. This is the positive approach and the avenue I desire to pursue in addressing you on the occasion of AAHPER's Seattle Convention.

Certain sports, physical education, and recreation activities involve bodily movements and exposures that are considered to be hazardous. However, we cannot overlook the fact that much of the value, pleasure, and popularity of these activities are derived from this same danger element. Complete removal of the hazards would be to eliminate a considerable portion of the participation appeal. Physical educators, intramural athletic directors, recreational leaders, and coaches agree that the very element of a calculated risk makes the participation a stimulating adventure and satisfies the participant's desire for competition, strenuous effort, and creative activity. A safety and injury control program is not designed merely to eliminate hazards. The primary purpose for motivating safety sports is to intelligently regulate and control the activities so that injuries can be either eliminated or reduced to an absolute minimum. Ultimately, the safe method for participation in sports activities involves the application of efficient procedures that adhere to established standards and experience. Consequently, we can think of safety as a primary contributor to an efficiency program.

The problem of accident prevention should be approached with the goal of accomplishing the following:

1. identification of the possible hazards or risks involved in each activity,
2. removal or reduction of the hazards, if possible,
3. methods of compensating for those risks that cannot be removed,
4. avoidance of new and unnecessary hazards.

To accomplish these objectives sports leaders would do well to consider a pattern that has been used advantageously in business and industry where such factors as morale, income, absenteeism, and increased production are paramount. Management literally spends hundreds of thousands of dollars annually for accident prevention because of its relationship to efficiency which in turn culminates in increased production. Many of these same business principles are applicable to the organization, administration, and supervision in sports activities. This pattern, employed efficiently in business and industry, involves the following six steps, each having both direct and indirect implications for accident prevention in a sports program: basic philosophy; organization; fact finding; analysis; selection of remedy; and application of remedy.

The application of this pattern should contribute to an understanding of the relevant factors in accident causation and the development of a program that will be committed to the cause of eliminating accidents from happening.

Approaching the Problem

All physical educators, recreational, and sports leaders in schools and communities have both a legal and moral responsibility to provide for the safety and welfare of all participants in sports activities. To properly comply with this obligation, the professional staff responsible for administering the school must (1) establish school buildings, grounds, equipment, and supplies that conform to high standards for safe and healthful living; (2) prepare a safety education curriculum and accident prevention program that is consistent in sound educational practices, with emphasis being directed on the individual's responsibility for his own safety and that of others in a rapidly moving complex society; and (3) obtain professionally prepared and highly skilled teachers and leaders who can effectively communicate all those aspects of knowledge, skills, and attitudes that will help students to cope with

existing problems in modern living. This responsibility in school administration is one of major importance for administrators and teaching personnel in all schools.

Experience has indicated that where administrators designate one competent individual to formulate and implement a safety and accident prevention program in the school, the desired results become a reality. Obviously, no one person can accomplish this large task without having adequate assistance. Supporting responsibilities must be assigned to school personnel, community leaders, and civic groups. To facilitate this total effort and for the efficient utilization of all existing resources, a large number of schools have organized Accident and Injury Prevention Committees.

Accidents in any area of endeavor may be defined as undesirable and unplanned occurrences often resulting in bodily harm, loss of school time, or property damage. When an accident takes place, in most instances the obvious result will be that of personal injury. In determining the contributory factors related to the accident, a five-step accident analysis should be conducted:

1. Environmental, heredity, and sociological factors
2. Faults of persons
3. Unsafe acts of a mechanical or physical nature
4. The accident
5. The injury.

A thorough understanding of each factor involved in the accident sequence must be achieved if the contributory factors in accident causation are to be minimized or eliminated.

A survey of numerous accident reports reveals that sound programs of accident and injury prevention have proven to be the most effective approach to accident reduction where movement and exposure are involved in human endeavor. Accident causation is not a problem of little dimension as can be concluded from an understanding of the previously discussed accident sequence. However, the problem of controlling all of the accident producing factors is by no means an insurmountable task.

Safety regulations should be developed in a democratic manner enlisting cooperative assistance from all concerned. Adherence to this approach should contribute to an understanding, practice, and acceptance of established rules and regulations designed to prevent accidents and injuries.

Desirable attitudes that have an influence on safe behavior, acquisition of knowledge, and an understanding

of safety procedures grow out of an interdisciplinary school program where administration, faculty, students, and school service personnel are aware of inherent dangers and are dedicated to the premise that accidents in most instances can be prevented.

Attitudinal development and education for safe living should be construed as an integral phase of established courses in science, home economics, art, industrial arts, physical education, health education, vocational and technical education, driver education, and other courses identified with potential hazards. Throughout the total school curriculum an organized program of experiences must be established that will culminate in developing and reinforcing desirable attitudes.

In a given year the National Safety Council reported that 67% of all school jurisdiction accidents involving boys, and 59% for girls, were experienced in physical education and recreation programs. From ages 10 to 14 the ratio for accident involvement is three boys to one girl, whereas at the high school level this increases to four to one.

Sports Activities Accident Control

To assist physical education instructors, recreation specialists, and leaders in girls' sports in successfully meeting their responsibilities for accident and injury prevention, four areas of organizational and administrative controls are presented as a possible direct approach to the problem:

I. Facilities Controls
   a. Space problems
   b. Structural problems
   c. Play areas
   d. Special area problems
   e. Weather, season, and surface conditions
   f. Maintenance of equipment

II. Leadership Controls
   a. The administrator
   b. The physical education director
   c. Service personnel
   d. Student leadership

III. Program Controls
   a. General health and physical condition as a factor in safety
   b. Classification of students for equitable participation
   c. Fire drill and building evacuation procedures procedures

d. Designation of facilities or areas for participation
e. Scheduling activities
f. Supervision of student activity clubs
g. Program planning procedures
h. Additional suggestions for program controls from faculty, students, and staff

IV. Student Controls
a. Personal characteristics related to accident causation
b. Cooperation of students in the safety and accident prevention program
c. Carry-over values of the school safety program.

Increased Opportunities for Leisure

As opportunities for increased participation in sports and recreational activities become more prevalent, the problem of accident and injury prevention gains in momentum. The work week continues to diminish in hours as evidenced by the fact that in 1800, the work week consisted of 84 hours; in 1909, this was reduced to 52 hours; and presently it is less than 40 hours. A recreational authority has predicted there will be a work week of seven hours within a century.

From a monetary standpoint, fantastic sums of money—approximately 50 billion dollars annually (12 percent of the total consumer population income)—are being spent for participation in leisure time activities.

In 1950 the backyard residential swimming pool was considered somewhat of a luxury. Today this is standard equipment in many residential areas. It has been estimated that in the greater Los Angeles area, a ratio of one residential pool for every three homes exists. There are approximately 50, 000 backyard swimming pools being installed annually.

Within the ten year period that began in 1960 there has been the fulfillment of a prediction that the use of small craft and recreational boats will increase in excessively large numbers. Regarding skin and scuba diving, there is an expenditure of approximately $15, 000, 000 annually for the purchase of goggles, swim fins, diving suits, masks, and miscellaneous equipment.

Trends in Girls' Sports

A variety of changes have been taking place in girls' sports that have an influence on accident frequencies and severities. In each of the following statements there is a

need for consideration and application if accidents are to be minimized or eliminated.

1. Additional years of participation

   As judged from the past, girls now begin participation in sports activities at a younger age and continue over longer periods. This trend has been rather prominent in swimming, diving, and track and field, along with baton twirling and various aspects of the dance program.

2. Participation in sports activities usually confined to men

   Increased interest and concern should be fostered in such sports as skin and scuba diving, soccer, lacrosse, football, karate, and judo.

3. Competitive aspect with men and boys

   In track and field and swimming, girls can, in some instances, compete on equal terms, and their desire to have an opportunity to prove their exceptional capabilities should be encouraged.

4. Coeducational participation

   Socialization in recreational sports has advanced well beyond social and square dancing, golf, tennis, and bowling. Today there are coed teams in volleyball, baseball, softball, water polo, and various other sports activities.

Aware of these trends that are taking place, we are challenged in the development of trained leadership that have the ability to administer, supervise, and instruct both girls and boys, men and women.

In approaching a conclusion to this presentation, may I share with you an SOS that is highly identifiable with the problem of sports safety. The first S represents Sincerity, the O is indicative of On Fire Enthusiasm, and the second S is related to Self-Confidence. I am of the impression that within this SOS we will find answers that we have been seeking to the sports safety problem.

Placed over the fireplace of a camp in Michigan where teachers of mutual interest work together periodically is an expression that can signify the position of sports leaders in the realm of accident and injury prevention: "He who would kindle another must glow himself."

Your dedicated interest and enthusiasm for the problem of accident and injury prevention can serve as a significant step in the solution.

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THE SECOND FIVE YEARS OF THE DIVISION*

The first five-year history of the Division of Safety Education encompasses 1959-1964 and appears in the 1967 issue of the Annual Safety Education Review. This article presents the Division's history from May, 1964, through March, 1969, and notes the various accomplishments on an annual basis, from the 1964 National Association Convention held in Washington, D. C., through the 1969 Association Convention held in Boston, Massachusetts. Professional literature cited (AAHPER publications) as a part of the Division's accomplishments are organized on a calendar-year basis from 1964 through 1969.

FROM WASHINGTON TO DALLAS—1965-1965

During the year between the Washington National AAHPER Convention in May, 1964, and the Dallas National Convention in March, 1965, there occurred a number of significant events within the Division of Safety Education. Aside from the routine responsibilities associated with preparation for the National Convention in Dallas, the major accomplishments during 1964-65 were:

1. The Safety Education Division underwent initial reorganization efforts and developed a tentative operating code. The coordination and direction of future Division activities was greatly facilitated under the new structure and the Executive Council was most enthusiastic about the reorganization.

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*Special acknowledgment is given to John T. Brown and Harry Nichols, graduate students at West Virginia University, for collecting information for this article.

Under the new structure, the five sections were abolished and the responsibility for operating the Division was vested in an Executive Council. The Executive Council is comprised of twelve members as follows: the division chairman, the division chairman-elect, the four most recent past division chairmen, and six members-at-large.

Under the new structure, two members-at-large were elected each year for three-year terms.

Committee structures were as follows:

Coordinating Committee—chairman, chairman-elect, first past chairman, and consultant.

Operations Committee—chairman, first past chairman, and one of the members-at-large from each of the three classes.

Convention Planning Committee—chairman-elect, second past chairman, fourth past chairman, and one member-at-large from each of the three classes.

Nominating Committee—first past chairman, chairman, chairman-elect, the three members-at-large from the Operations Committee.

2. The Division had as a major activity for the coming year the implementation of programs as a follow-up to the National Conference on Accident Prevention in Physical Education, Athletics, and Recreational Sports.

The Division encouraged the states to develop the implementation programs. Copies of the Suggested School Safety Policies were distributed to state officials. Pledges of support in this project were solicited from the various state officials.

3. A conference of 17 persons was held at Bradford Woods, Martinsville, Indiana, January 24-26, 1965, for the preparation of an outline of a Guide for Accident Prevention in Physical Education, Athletics, and Recreational Sports. This project was financed by a contract with the United States Public Health Service. The outline was completed during the conference.

4. Several conferences and meetings were devoted to planning for evaluation and projection of activities of the Division of Safety Education.

5. The purpose of the Division was to provide leadership in developing and promoting sound school and college safety education and accident prevention programs.

6. Charles Peter Yost was suggested as Safety Education Division Representative to the Professional Preparation Conference on Graduate Study.

FROM DALLAS TO CHICAGO—1965-1966

Continuation of many projects initiated by Dr. Warren J. Huffman's administration (1964-65) was one result of the progress made during 1965-66. Some of the major accomplishments were as follows:

1. There was a very concerned effort to emphasize that the Division of Safety Education conceive itself as a service organization to all other AAHPER divisions. A Relationships Committee, under the direction of Dr. Alyce Cheska, was formed. Each division had a representative who was a liaison between his division and the Division of Safety Education. This action provided an excellent opportunity for service to the Association.
2. Charles Peter Yost was appointed historian of the Division of Safety Education.
3. Dr. Edward Mileff became the consultant to the Division of Safety Education as a result of Dr. John H. Cooper's accepting a position as Executive Secretary for Administration of the AAHPER.
4. A framed service award was presented to Wayne P. Huges, following a eulogy by Homer Allen, at the annual Health and Safety Education Division luncheon in the Hotel Blackstone on Sunday, March 20, for his many fine contributions to the field of safety. Dr. Hughes was director of the School and College Department of the National Safety Council since 1941, and he helped to organize the Division of Safety Education of AAHPER.
5. A committee was selected for planning the publication of a text dealing with injury prevention in physical education, athletics, and recreational sports.
6. Implementation of the Suggested School Safety Policies was continued.
7. Appointments:
   A. The Division appointed Dr. Alyce Cheska to serve on the Council for one year, 1965-66, in place of Helen Hartwig, who was elected vice-president-elect of AAHPER and Division Chairman.
   B. The Division appointed Al Banks, Charles Carrol, Joseph Dzenowagis, Donald Ludwig, and Robert Oswald to a Joint Committee with Health Education Division to make recommendations for improved medical self-help programs in secondary schools for the United States Public Health Services.
   C. The Division sent a list to AAHPER of 24 persons representing the Division of Safety Education at the National Conference on Graduate Education in Health Education,

Physical Education, Recreation Education, Safety Education, and Dance.

D. The Division approved the appointments of Homer Allen and Don Cash Seaton, 1966-67, for the JOHPER Editorial Board.

E. Joseph Dzenowagis was recommended to act as liaison between the Division of Safety Education and Health Education on the Educational Testing Service Project Committee of the Health Education Division.

F. The Division of Safety Education's recommendations for the AAHPER Committee on Terminology were A. E. Florio, J. Duke Elkow, and Charles Peter Yost.

FROM CHICAGO TO LAS VEGAS—1966-1967

During 1966-1967, the most important events of the Division of Safety Education included the decisions to conduct a Second National Conference on Accident Prevention in Physical Education, Athletics, and Recreation, and to update Suggested School Safety Policies.

1. A Steering Committee composed of the late Homer Allen, who was chairman, J. Duke Elkow, Charles Peter Yost, and Daniel P. Webster met at the National Education Association Center in preparation for the National Conference scheduled for October 11-13, 1967, at the National Education Association Center.

2. The Safety Division's Coordinating Committee, comprised of the three vice-presidents, held two meetings at the National Education Association Center in Washington, D. C. These were conducted on June 15-17, 1966, and November 5, 1966. Plans were discussed for the development of the textbook, Safety in Sports: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation. The purpose of this project was to develop an instructional and reference textbook for professional and in-service training of volunteer career administrators, supervisors, teachers, and leaders of athletics, physical education, and recreational sports.

3. Appointments:

A. Margaret Fox was appointed to fill the vacancy on the Division Executive Council created by the election of J. Duke Elkow as vice-president-elect of the Division of Safety Education.

B. Charles Peter Yost was appointed to fill the vacancy on the Division Executive Council created by the death of Homer R. Allen and to replace him as chairman of the Second

National Conference on Accident Prevention in Physical Education, Athletics, and Recreation.

C. Frank Svarc and Joseph G. Dzenowagis were appointed to the JOHPER Editorial Board. Warren Huffman filled the term of Homer Allen on this board.

4. The Division of Safety Education paid special tribute to Herbert J. Stack and Homer R. Allen with "In Memoriam" recognition of their many valuable contributions made to the Division and Association over the years.

As a member of the AAHPER, Herbert J. Stack was an initiator and later first consultant (honorary) of the Division of Safety Education of AAHPER.

5. At the Division Executive Council in Las Vegas much discussion was given to: obtaining funds for textbook projects; the question, "What would happen to the Division of Safety Education if the Association should reorganize into some kind of federation in the future"; and updating the publication, Suggested School Safety Policies.

6. The Division of Safety Education co-sponsored the Second National Conference on Accident Prevention in Physical Education, Athletics, and Recreation on October 11-13, 1967, at the National Education Association Headquarters in Washington, D. C. The Planning Committee for the conference was composed of Charles Peter Yost, West Virginia University; J. Duke Elkow, New York University; Daniel P. Webster, United States Public Health Service; Edward Mileff, AAHPER; and Homer Allen, Purdue University.

FROM LAS VEGAS TO ST. LOUIS—1967-1968

During 1967-1968 the most important events of the Division of Safety Education were to update Suggested School Safety Policies and to complete plans associated with the textbook project, Safety in Sports: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation. Officers decided that improvement was needed on the relationship of the Division of Safety Education to other divisions of AAHPER.

Projects and accomplishments of the Division of Safety Education included:

1. The Second National Conference on Accident Prevention in Physical Education, Athletics, and Recreation was held in Washington, D. C., October 11-13, 1967, to update the Division booklet, Suggested School Safety Policies. Charles Peter Yost served as the conference chairman, replacing the late Homer Allen. The title was changed to School Safety Policies with Emphasis on

Physical Education, Athletics, and Recreation. The Editorial Committee for this publication was comprised of Joseph G. Dzenowagis, J. Duke Elkow, Norman J. Johnson, Edward Mileff, Daniel P. Webster, Charles Peter Yost (editor).

2. The textbook project (Safety in Sports: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation) was funded jointly by the United States Public Health Service and the Association. The first of the three phases was completed in June, 1968. Bernard I. Loft was selected as the project director and Charles Peter Yost was selected as editor for the text.

3. Discussion and action was taken to include public school personnel, where possible, on the slate of candidates for the executive council.

4. There was an organization of a Publications Project Committee including: Kenneth S. Clarke, J. Duke Elkow, A. E. Florio, Bernard I. Loft, Daniel P. Webster, and Charles Peter Yost.

This committee was organized for the purpose of coordinating safety publications and supplying educational publications with articles of interest.

5. Appointments:
   A. Margaret Fox was appointed on the Division Executive Council as a replacement for J. Duke Elkow as a member-at-large.
   B. Norman J. Johnson replaced the late Homer Allen on the Division Editorial Committee for Suggested School Safety Policies.

FROM ST. LOUIS TO BOSTON—1968-1969

During the year from 1968-69 there was still more discussion regarding the "placement" of the Safety Education should the Association be reorganized into a federation, and possible changes in teacher preparation procedure for accreditation of teacher preparation colleges.

The Division activities this year included:

1. There was a lengthy discussion by the members of the Coordinating Committee regarding the "placement" of the Safety Education if the Association was reorganized into a federation. J. Duke Elkow represented the Division in developing a preliminary design for converting AAHPER into a Federation for School Health, Physical Education, and Recreation.

2. There was reported discussion of possible change in teacher preparation procedure for accreditation of teacher preparation colleges. Tentative guidelines were identified and passed. Two representatives were selected from each division to serve on an Association committee.

3. In order to further promote the use of School Safety Policies With Emphasis on Physical Education and Recreation, the Division planned to distribute copies and to send them to various key individuals interested in Safety Education, including:

A. State Education Department Personnel
B. State Health Department Personnel
C. State Education Departments of the National Safety Council list of Safety Courses in Colleges
D. Editors of State Education Journals

4. There was attention given to the textbook project by changing the title from "Safety in Sports" to "Sports Safety." The Editorial Committee selected for the Sports Safety Textbook Project included: Kenneth S. Clarke, J. Duke Elkow, A. E. Florio, Bernard I. Loft, Edward Mileff, John L. Morgan, Daniel P. Webster, and Charles Peter Yost.

5. Some of the Council members felt it would be more feasible if the Division of Safety Education would have joint sessions with the other divisions to discuss needs in common and how they could be met through cooperative action.

6. Formulation of guidelines were prepared and distributed and were to be used on a trial basis for one year. They were: Guidelines for Committees and Commission; Guidelines for Conferences; and Guidelines for Division Budget.

THE PEOPLE ACTIVE IN THE SAFETY EDUCATION DIVISION FROM 1964-1969

Many people made contributions to the Division of Safety Education during 1964-1969 and have been identified whenever appropriate elsewhere in this article. Special mention is made at this time of the Division officers and members of the Division Executive Council.

SAFETY EDUCATION DIVISION OFFICERS

	Vice-President	Vice-President-elect
1964-1965	Warren J. Huffman	Don Cash Seaton
1965-1966	Don Cash Seaton	Helen Hartwig
1966-1967	Helen K. Hartwig	William Helms
1967-1968	William Helms	J. Duke Elkow
1968-1969	J. Duke Elkow	Robert L. Holland

Past Vice-President		Consultant
1964-1965	Homer Allen	Edward Mileff
1965-1966	Warren Huffman	Edward Mileff
1966-1967	Don Cash Seaton	Edward Mileff
1967-1968	Helen Hartwig	Edward Mileff
1968-1969	William Helms	Edward Mileff

DIVISION EXECUTIVE COUNCIL

1964-1965

James Genasci, Springfield College, Springfield, Mass.
Helen Hartwig, McKnight School, University City, Mo.
William Gorden Helms, University of Michigan, Ann Arbor, Mich.
Robert Holland. State Department of Education, Columbus, Ohio
O. N. Hunter, University of Utah, Salt Lake City, Utah
Bernard I. Loft, Indiana University, Bloomington, Ind.
Rudolph Memmel, Public Schools, Cincinnati, Ohio
Stanley Pechar, New York University, New York, N. Y.
Charles Peter Yost, West Virginia University, Morgantown, W. Va.

1965-1966

Homer Allen, Purdue University, Lafayette, Ind.
Alyce Cheska, Arizona State College, Flagstaff, Ariz.
J. Duke Elkow, Brooklyn College, Brooklyn, N. Y.
James Genasci, Springfield College, Springfield, Mass.
Robert Holland, State Department of Education, Columbus, Ohio
O. N. Hunter, University of Utah, Salt Lake City, Utah
Robert Kaplan, American Medical Association, Chicago, Ill.
Stanley Pechar, School of Education, New York University, New York, N. Y.
Charles Peter Yost, West Virginia University, Morgantown, W. Va.

1966-1967

Homer Allen, Purdue University, Lafayette, Ind.
Joseph G. Dzenowagis, Michigan State University, East Lansing, Mich.
J. Duke Elkow, Brooklyn College, Brooklyn, N. Y.
Robert Holland, State Department of Education, Columbus, Ohio
Warren J. Huffman, University of Illinois, Urbana, Ill.
O. N. Hunter, University of Utah, Salt Lake City, Utah
Robert Kaplan, Ohio State University, Columbus, Ohio
Stanley Pechar, New York University, New York, N. Y.
Francis C. Svarc, Chicago Board of Education, Chicago, Ill.

1967-1968

Joseph G. Dzenowagis, Michigan State University, East Lansing, Mich.
Margaret G. Fox, University of Iowa, Iowa City, Iowa
Warren J. Huffman, University of Illinois, Champaign, Ill.
Norman J. Johnson, Lincoln University, Jefferson City, Mo.
Robert Kaplan, Ohio State University, Columbus, Ohio
Don Cash Seaton, University of Kentucky, Lexington, Ky.
Lewis Spears, Texas Education Agency, Austin, Texas
Francis C. Svarc, Chicago Board of Education, Chicago, Ill.

1968-1969

Kenneth S. Clarke, American Academy of Orthopaedic Surgeons, 430 N. Dearborn Avenue, Chicago, Ill. 60611
Joseph G. Dzenowagis, Michigan State University, East Lansing, Mich. 48823
A. E. "Joe" Florio, University of Illinois, Champaign, Ill. 61820
Helen K. Hartwig, McKnight School, St. Louis, Mo. 63101
Warren J. Huffman, University of Illinois, Champaign, Ill. 61820
Norman J. Johnson, Lincoln University, Jefferson City, Mo. 65101
Don Cash Seaton, University of Kentucky, Lexington, Ky. 40506
Lewis Spears, Texas Education Agency, Austin, Texas 78711
Francis C. Svarc, Chicago Board of Education, Chicago, Ill. 60601
Ex-Officio Member: Charles Peter Yost, West Virginia University, Morgantown, W. Va. 26506

CONTRIBUTIONS TO PROFESSIONAL LITERATURE

During the second five years of the Safety Education Division many people contributed to the literature in the field of safety. The information which follows indicates the articles which appeared in the Journal of Health, Physical Education and Recreation and the Annual Safety Education Review from 1964 through 1969.

JOHPER ARTICLES

1964

Albright, Gus, and Hudson, Cecile, "Community Action for Safety" (November-December)

Harris, William H., "Suggested Criteria for Evaluating Health and Safety Teaching Materials" (February)
Hein, Fred V., "Critical Issues in Health and Safety Education" (June)
Mathews, Donald K.; Potter, Fred; and Welgus, William E., "A New Aid to Gun Safety" (November-December)
Mickelsen, Mickee, "Ski Safety" (February)
Stromgren, George, "Injury Prevention Check-Up Program" (May)
Williams, Elizabeth, "The Physical Educator Looks at Safety" (November-December)
Yost, Charles Peter, "National Conference on Accident Prevention in Physical Education, Athletics, and Recreation" (April)

1965

Authorized Statement by the American Medical Association's Committee on Exercise and Fitness, "Health Problems Revealed During Physical Activity" (September)
Litle, Billy Jean, "Softball Safety" (May)
Rasch, Philip J., and Kroll, Walter, "Safe Wrestling" (March)
Slezak, Edward J., "Fifty Checkpoints for a Safe Playground" (May)

1966

_____, "Safety Education Instructional Posters" (March)
_____, "Distinctive Role of the Elementary School in Education for Safe Living" (September)
Holtz, Doris D., "Safe Boating" (May)
Piscopo, John, "Clues to Safety on the Trampoline" (April)
Reuter, Edward R., "Self-Defense for Girls" (March)

1967

Bender, Jay A.; Kaplan, Harold M.; and Pierson, Joe K., "Injury Control Through Isometrics and Isotonics" (February)
Fairbanks, Berthaida, "Teaching How to Swim Is Not Enough" (March)
Yost, Charles Peter, "Total Fitness and the Prevention of Accidents" (March)

1968

Grissom, Deward, "Man Living Healthfully: Our Common Goal" (September)

1969

Clarke, Kenneth C., "Accident Prevention Research in Sports" (February)

ANNUAL SAFETY EDUCATION REVIEW ARTICLES

1964

Allen, Homer, "Introductory Statement"

_____, "Principles of Safety in School Bus Transportation"

Clarke, Kenneth S., "Safety Implications for Athletics"

Elkow, J. Duke, "Safety Education and Accident Prevention"

Fagan, Clifford B., "Saved by the Protector"

Fox, Margaret G., "Implications for Physical Education of the Conference on Accident Prevention"

Helms, William G., "Safety Aspects of Family Camping"

Memmel, Rudolph, "Developing Safety Consciousness in Physical Education"

Seals, Thomas A., "Collateral Safety Responsibilities of Physical Education Teachers"

Vernier, Elmon, "Director of Physical Education: Concern for Safety Awareness"

Webster, Daniel P., "Accident Prevention in Recreation"

Williams, Elizabeth, "A Physical Educator Looks at Safety"

Wyman, Frank L. "National Rifle Association Programs in Firearms Safety"

Yost, Charles Peter, "First Five Years of the Division of Safety Education"

1965

Allen, Homer, and Lynch, Robert, "Student Accidents at Purdue University"

Belzer, Edwin G., Jr., "A Review of Left-Foot Braking"

Clarke, Kenneth S., "The Trainer's Greatest Contribution"

Cross, Wayne Dewitte, "Accidental Drownings in Iowa, 1950-1963"

Florio, A. E., "Traffic Safety at Home and Abroad"

Ganslen, Richard V., "Design for Safety"

Hartwig, Helen, "Where There Is Teaching, There Is Safety"

Huffman, Warren J., "Accomplishments of the Division of Safety Education, 1964-65"

Loft, Bernard I., "Teaching Safety Education on a Higher Education Level"

Smyke, Edward J., "Fred Lanoue and Drownproofing"

Webster, Daniel P., "Injury Control in Girls and Women's Sports: Implications of the Accident Prevention Conference"

1966

Barber, William J., Jr., "New Steps in the Four-Phase Driver Education Program"

Beechner, Ralph W., "Results of the Interscholastic Gymnastic Accident Survey"

Bender, Jay A.; Kaplan, Harold M.; and Pierson, Joe, "Injury Control Through Isometrics and Isotonics in Competitive Sports"

Lehr, Eugene L., "Recreation Safety"

Macdowell, Edward, and Bilek, Edward, "A Study Concerned with Rebound Tumbling Safety in Elementary Schools in Connecticut"

Paul, William D., "Crash Diets and Wrestling"

Reuter, Edward R., "Self-Defense for Girls"

Ryan, Allan J., "The Response of Athletes to Heat Stress"

Scotts, Merrill, "The School Administrator Must Be Safety-Minded"

Seaton, Don Cash, "Activities of the Division of Safety Education, 1965-66"

Steinhilber, Augustus, "Liability in Physical Education"

1967

Clarke, Kenneth S., "Safety in Recreation and Athletics for the Handicapped"

_____, "The Distinctive Role of the Elementary School in Education for Safe Living—A Statement of Belief"

Elkow, J. Duke, "Philosophy of Recreation Safety"

_____, "Research on Disabled Drivers"

Florio, A. E., "Safety in Interscholastics and Intramural Athletics"

Hartwig, Helen, "Accomplishments of the Division of Safety Education, 1966-67"

Holloway, Irmagene N., "Safety for the Handicapped in Recreation"

Russell, Charles W., "Why Teach Small Craft and Water Safety in Schools?"

Yost, Charles Peter, "Total Fitness and Prevention of Accidents"

1968

Brislane, Dolores W., and Kinderfather, Don, "Safety in Gymnastics"

Clarke, Kenneth S., "Accident Prevention Research in Sports"

Elkow, J. Duke, "New Frontiers in Safety"

Helms, William G., "Accomplishments of the Division of Safety Education, 1967-68"

Holloway, Irmagene N., "Use of Television"

Johnson, Bernard, "An Official's Role in Safety and Sports"

Liebee, Howard C., "Legal Liability Aspects of Curriculum Development"
Marshall, Robert L., "Driver and Traffic Safety in Education"
Murphy, A. B., "Family Camping—Can It Be Done Safely?"
Tarrants. William E., "The Operations of the National Highway Safety Bureau"
Yost, Charles Peter, "Curriculum Planning in Safety Education"

1969

Amato, Gay, "Teaching Safety Through Perceptual-Motor Activities"
Donley, Philip B., "Undergraduate Education for Management of Athletic Injuries"
Dzenowagis, Joseph G., "School Safety Policies"
Ecker, Tom, "Pole Vault and High Jump Safety Problems"
Elkow, J. Duke, "Accident Experiences of Men and Women"
_____, "Accomplishments of the Division of Safety Education, 1968-69"
Holloway, Irmagene N., "Sex and Safety"
Huffman, Warren J., "Safety and Liability"
Jokl, Ernst, "Athletes and Drugs"
Rand, J. A., "Winter Sport Accident Prevention"
Seaton, Don Cash, "Hazard Analysis and Control in Track and Field"

CONCLUDING STATEMENT

The second five-year history includes the major points of changing the division structure, writing new operating codes, conducting a national conference, participating in the Graduate Conference, revising School Safety Policies, and contributing to the literature in the area of safety. A special accomplishment was initiation of the textbook project, Sports Safety, with financial assistance from the U. S. Public Health Service. Just where the Safety Education Division will be placed in the Association reorganization is of concern to many people. As was expressed in the 1964 Annual Safety Education Review, after writing the Division's first five-year history, "No one group of people has sole ownership of safety education; it is a matter with which all people must be concerned." It thus follows that all groups within the alliance of the AAHPER must build in safety as it pertains to their individual disciplines or areas of responsibility. Safety permeates all of man's endeavors. It cannot be left to chance

ROBERT L. HOLLAND
Ohio Department of Education
Columbus

ACCOMPLISHMENTS OF THE DIVISION, 1969-70

The Division of Safety Education experienced a busy and productive year. Several projects were completed and the Division continued its emphasis on maintaining a "service arm" for all structures in AAHPER.

The Division was represented by at least one of its Executive Council members at the following meetings:

1. The National Safety Congress, Chicago, Illinois
2. American Medical Association Conference on the Medical Aspects of Sports, Denver, Colorado
3. Seventh National Conference of City-County Directors of HPER, "Preparing Teachers for a Changing Society," Kansas City, Missouri
4. All AAHPER District Conventions

The chairman of the Division served on three committees of the AAHPER Board of Directors. On one of these assignments, he served as chairman of the AAHPER Reorganization Study Committee. The work of this committee was accepted by both the AAHPER Board of Directors and the Representative Assembly at the annual national convention in Seattle.

The Division activities and accomplishments for 1969-70 are as follows:

Division Executive Council

The Division Executive Council met May 2-4, 1968, in Washington, D. C. The official minutes of this meeting were shared with all members of the AAHPER Board of Directors. Every member of the Executive Council was involved in the annual convention program and served the Division and Association in a variety of other assignments.

Division Committees

The Committee to Plan and Organize the Division's Evaluation and Projection Conference met on November 7, 1969. J. Duke Elkow chaired the meeting and served as director of the conference on May 1-3, 1970. The newly elected vice-presidents of the Association, at the Seattle Convention, were invited to participate as guests of the Division of Safety Education.

The Coordinating Committee (vice-presidents) of the Division met on November 8, 1969, in Washington, D. C.

The Convention Planning Committee chaired by Norman J. Johnson completed the program for the annual convention. A plan to share the Division of Safety Education's program time with other divisions was implemented.

A. E. Florio, chairman of the Professional Preparation Task Force of the Division, was appointed to the Professional Preparation Panel of AAHPER.

The Division Research Committee was commissioned to redefine its goals and purposes in respect to the research needs of the Division and Association regarding safety education.

The Safety Personnel Resources Committee continued its efforts to develop a roster of specialists in safety education. The committee presented a report in Seattle which indicated that the need, scope, and value of the project were not warranted. The committee was dissolved with an expression of the appreciation of the Division Executive Council for its efforts.

Division Historian

Warren Huffman was appointed Division historian replacing Charles Peter Yost who presented the manuscript titled "The Second Five Years of the Division of Safety Education" to the Division Executive Council Meeting in Seattle. Dr. Yost was commended and thanked with a standing ovation by council members for his many contributions to the Division as historian and officer over the past several years.

Division Publications

During 1969 the Division published under the editorship of past chairman J. Duke Elkow the Eighth Annual Safety Review. It contains ten papers presented at the Division meetings during the AAHPER National Convention held in Boston during April of 1968. The Textbook Project

of the Division is reaching completion. The manuscript for the book, Sports Safety: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation, was presented, reviewed, and accepted with only minor editorial comments by the U. S. Public Health Service. The project was sponsored by the U. S. Public Health Service and the Association. The textbook will be published and distributed by the Association. Distribution is anticipated for late fall of 1970.

Division's Future Plans

1. National Conference on Sports Safety—The Board of Directors of the American Association for Health, Physical Education, and Recreation has approved the National Conference on Sports Safety to be held during the 1971-72 fiscal year. This conference will be based on the Textbook Project, Sports Safety: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation.
2. Teaching Safety in the Elementary School—The Division of Safety Education will invite Charles Peter Yost to revise the booklet. If Dr. Yost is unable to accept this responsibility, Dr. Johnson, vice-president of the Division, will appoint a capable and willing individual to follow through on this task.
3. Safety Education Research—With the reconstitution of the research committee of the Division, attention will be given to new sources of funding for projects as well as priority needs in this area as identified by the committee.

A Vote of Appreciation

A unanimous vote of commendation and appreciation was extended to Edward Mileff for his 5 years of service as consultant to the Division. Dr. Mileff announced his resignation as Assistant Executive Secretary and Consultant in Health and Safety Education for the AAHPER to return to college teaching. The best wishes of every member of the Division is extended to Ed and his family in his new assignment as a member of the faculty at Indiana University of Pennsylvania, Indiana, Pennsylvania.

The chairman of the Division of Safety Education expressed his deep appreciation to all Division members who made this a successful and enjoyable year.

SUGGESTED OUTLINE FOR A COLLEGE COURSE IN SPORTS SAFETY

Course Title and Description

SPORTS SAFETY IN MODERN SOCIETY. Philosophy of sports safety: human and environmental factors and their interrelationships in sports injury and their control; risk-taking and decision solution strategies; application of accident prevention and injury control to selected sports; contributions of sports medicine to safety. (30-45 hours; 2-3 credits; U. or G.)

Course Objectives

Develop a philosophy of sports safety
Analyze the human factors leading to sports safety
Identify the environmental factors in sports safety
Study measures for the control of hazards in sports
Determine risk-taking and decision-making procedures for control of sports injury
Study specific controls designed to lessen accidents in selected sports and athletic activities
Contribute a fuller understanding of leadership responsibilities of professionals in sports and athletics to achieve greater safety in sports

Course Content

I. THE INJURY PROBLEM IN SPORTS

The Problem Defined

Accidents in Society
Injury Control
Risk Acceptance
Accident Prevention
Inherent Risks in Sports Activities

Data of Public Involvement and Accidents in Various Activities

Organized Programs
Unorganized Recreational Sports
Preschool Physical Activities
School and College Accident and Injuries
Need for Data and Accident Reporting

II. A PHILOSOPHY OF ACCIDENT AND INJURY CONTROL

Factors of Causation
Principles of Accident Prevention and Hazard Control
Individual Responsibilities for Safety in Sports
Community Relationships and Involvement

III. ADMINISTRATION AND SUPERVISION OF SPORTS PROGRAMS

Development of Safety Policies

External Controls

Rules and Regulations of Leagues and Conferences
State Laws and Liability
Insurance and Athletic Benefit Plans
Officiating Controls

Internal Controls

School Administrative Principles and Policies

Superintendent, Principal
Department Heads; Staff
Faculty: Instructors and Coaches
Students

Physical and Health Examinations

Limitations of Parents' Consent

Liability Waivers
Travel Permit Forms

Homogeneous Grouping for Safe Competition

Age, Height, Weight
Competency

Facilities, Leadership and Equipment Controls

In School: boys-girls
Out of School: adults

Transportation Safety - Players, Spectators

Environmental Safety for Spectators

Fire Prevention - Fire Protection for Sports Activities

Conduct of Athletic Sports for Safety

Even and Fair Competition
Limits on Control of Contests
Limits on Practice Sessions
Preseason Practice Policies

Leadership Controls

Teaching Techniques

School Policies for Teacher Responsibilities
Progression in Teaching - Safety Features
Motivational Procedures
Evaluation of the Teaching Process and Safety

Facilities, Equipment, and Supplies

Planning of Facilities

Program Requirements
Equipment Requirements
Architectural Technology for Safety Controls

Chief Safety Aspects of Facilities, Equipment, and Supplies

Game Play Areas, Surface, Lighting, Ventilation
Protective Enclosure
Placement of Equipment
Safety Standards for Purchase of Facilities, Equipment, and Supplies
Locker and Shower Room Layout
Storage Areas, Security Against Unauthorized Use
Color Coding of Devices, Areas, Equipment for Safety

Supervision of Purchases for Safety of Materials

Age, Sex, Participants, Type of Activities
Educating the Participant in Safety Procedures
Periodic Evaluation of Facilities and Equipment

IV. FIRST AID AND EMERGENCY PROCEDURES

Definition and Significance of First Aid

Role in Accident Prevention
Relationships - First Aider with Medical Advisor
Implications from the Nature of Sports

Master Plan for First Aid and Emergency Procedures

Written Policies
Procedures
First Aid Facilities and Supplies

Competencies of Leadership in First Aid

V. ACCIDENT INVESTIGATION AND REPORTING

Purpose and Procedures

Report Forms

Investigation - Remedial Action

Reporting

Cooperation with State and National Agencies
Monthly/Annual Summaries of Data

VI. SPORTS ACTIVITIES

Development and Play Activities

Team Sports

Baseball and Softball
Basketball
Field Hockey
Football: Touch, Flag
Ice Hockey
LaCrosse
Soccer
Volleyball

Individual Sports

Archery
Bowling
Equitation
Golf
Gymnastics
Marksmanship
Track and Field
Weightlifting

Dual Sports

Fencing
Handball
Judo
Racquet and Paddle Sports
Wrestling

Aquatic Activities

- Swimming, Diving, Water Survival, and Rescue
- Recreational Swimming
- Fancy Diving
- Water Polo

Open Water Aquatic Sports

- Small Craft
- Water Skiing
- Skin, Scuba Diving
- Surfing

Winter Sports

- Skating
- Skiing
- Tobogganing and Sledding
- Iceboating
- Ice Fishing
- Snowmobiling
- Snowshoeing

Outing Activities

- Fishing: Stream, Surf, Boat
- Camping
- Hunting
- Hiking and Mountaineering
- Bicycling
- Recreational Motorcycling

Dance

VII. EVALUATION AND SUMMARY

Objectives Achieved

New Problems in Sports Safety

The Future of Sports Safety

TEXT: Sports Safety: Accident Prevention and Injury Control in Physical Education, Athletics, and Recreation. Charles Peter Yost, Editor. American Association for Health, Physical Education, and Recreation and U.S. Public Health Service. Washington, D.C.: The Association, 1970.

REFERENCES

American Association for Health, Physical Education, and Recreation, Annual Safety Education Review. Washington, D.C.: The Association. Published Annually.

American Association for Health, Physical Education, and Recreation, School Safety Policies with Emphasis on Physical Education, Athletics, and Recreation. Washington, D.C.: The Association, 1968. 32 pp.

American Medical Association, Standard Nomenclature of Athletic Injuries. Chicago: American Medical Association; Subcommittee on Classification of Sports Injuries Committee on the Medical Aspects of Sports, 1966. 157 pp. (paperback)

American Public Health Association, Accident Prevention. The Role of Physicians and Public Health Workers. Maxwell N. Halsey, Editor. New York: McGraw-Hill Book Company, 1961. 400 pp.

Florio, A.E., and Stafford, G.T. Safety Education, New York: McGraw-Hill Book Company, Third Edition, 1969. 459 pp.

Grieve, Andrew, The Legal Aspects of Athletics. New York: A.S. Barnes and Company, Inc., 1969. 183 pp.

Haddon, William Jr., Suchman, Edward A., and Klein, David, Accident Research - Methods and Approaches. New York: Harper and Row, 1964. 752 pp.

Liebee, Howard, Tort Liability for Injuries to Pupils. Ann Arbor, Michigan: Campus Publishers, 1965.

National Commission on Safety Education, Research Division of National Education Association, Who Is Liable for Pupil Injuries? Washington, D. C.: The Association (NEA), 1963

National Safety Council, Accident Facts. Chicago: The Council. Published Annually.

Seaton, Don Cash, Stack, Herbert J., and Loft, Bernard I., Administration and Supervision of Safety Education. New York: The Macmillan Company, 1969. 368 pp.

Stack, Herbert J., and Elkow, J. Duke, Education for Safe Living. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., Fourth Edition, 1966. 374 pp.

Strasser, Marland K., and others, Fundamentals of Safety Education. New York: The Macmillan Company, 1964. 453 pp.

Thorndike, Augustus, Athletic Injuries. Philadelphia: Lea and Febiger, 1962. 259 pp.

AMERICAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION,
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